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FERTILIZER ANALYSES

FERTILIZER REGISTRATIONS, Pages 24-30

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ADDRESS

Department of Chemistry, University of Maryland

COLLEGE PARK, MD.

CHEMISTRY STAFF

STATE DEPARTMENT

Neil E. Gordon, Ph. D., State Chemist.

L. H. VanWormer, M. S., Chemist in Charge of Fertilizers and Lime.

L. E. Bopst, B. S., Chemist in Charge of Feeds.

A. L. Flenner, B. S., Assistant Chemist.

H. R. Walls, Inspector and Assistant Chemist.

E. C. Donaldson, M. S., Inspector and Assistant Chemist.

F. G. Baggs, Clerk.

R. F. Malone, Stenographer.

The inspection, analysis, and control work of the fertilizer and feed trade is carried on by the State Department, but the State Department is so related to the chemical work of the University that the other men of the Chemical Staff who are mentioned below may be called on for help in time of need; and, furthermore, it is the purpose of the majority of this Chemical Staff to be carrying on some investigations which bear directly or indirectly on the properties of feeds, fertilizers, and lime.

Physical Chemistry.

Neil E. Gordon, Ph. D., Professor.

Grafflin, B. S., Assistant.

Organic Chemistry.

M. Kharasch, Ph. D.. Professor.

Sher, B. S., Assistant.

Industrial Chemistry.

L. B. Broughton, M. S., Professor.

Scheuch, B. S., Assistant.

Darkis, B. S., Assistant.

Inorganic Chemistry.

E. B. Starkey, B. S., Instructor.

D. C. Lichtenwalner, B. S., Instructor.

Elder, B. S., Assistant.

Analytical Chemistry.

R. C. Wiley, M. S., Associate Professor.

COMMERCIAL FERTILIZERS

This bulletin deals with the State control of commercial fertilizers. If information is desired concerning the nature and use of fertilizers, it may be found in "Fertilizers for Maryland Soil" by A. G. McCall. Copies will be sent free on application to the Experiment Station, College Park, Maryland.

COLLECTION OF SAMPLES

Inspectors sent out by the State Chemist obtain most of the samples while the fertilizers are in transit. A majority of the samples are taken from vessels, wharves, cars, stations, farmers' wagons, barns, etc. In case a farmer sends a sample, his initials will be found after the place of sampling. Where the sample is a composite of samples taken from two or more places, the name of the place is not given.

FREE ANALYSIS

Under certain conditions, individual farmers may obtain free analysis of a sample of fertilizer. In order to obtain this free service, he must first send to the State Chemist, College Park, Maryland, for blank forms and directions, stating the number of blanks wanted. One blank is required for each sample. Samples not taken as required by law cannot be accepted for analysis.

LOW ANALYSES VERSUS HIGH ANALYSES FERTILIZERS

There is a statement in the fertilizer law concerning high analyses which makes it unlawful for the manufacturer to brand as "high grade" any fertilizer containing less than 1.65% of nitrogen (equivalent to 2% of ammonia), 10% of available phosphoric acid, and 2% of potash.

The plant food in high analysis fertilizers does not usually cost as much per pound as it does in low analyses fertilizers, although the price per ton or sack may be higher.

In low analyses fertilizers the cost of handling, freight, etc., are high in proportion to the plant food present.

The manufacturers have already purposed to work toward the elimination of low analyses fertilizers. The farmers can well afford to help forward this movement by using only high analyses fertilizers.

COMPARATIVE VALUES OF FERTILIZERS

Since the analysis in our laboratory gives the percentage or pounds per hundred, it is only necessary to multiply the price per pound by 20 in order to get the value of one per cent. for one ton of fertilizer. This is designated in the following table as the value per unit.

TABLE FOR CALCULATING FERTILIZER VALUES

(1)	Nitrogen calculated as ammonia.....	$5.00	per unit.
(2)	Available phosphoric acid		
(a)	In mixed fertilizers or in dissolved rock	1.00	" "
(b)	In tankage or ground bone.....	.60	" "
(3)	Insoluble phosphoric acid.....	.20	" "
(4)	Potash.....	1.50	" "

COMPARATIVE VALUES OF FERTILIZERS

In order to compare values of fertilizers multiply the percentage of each plant food in the fertilizer by the respective value per unit given in the table, and add the results together: For example, in the case of a complete fertilizer with an analysis of 4-8-5, we would have 4 per cent. of ammonia, 8 per cent. of phosphoric acid, and 5 per cent. of potash. Since by the above table ammonia is worth $5.00 per unit, available phosphoric acid $1.00, and potash $1.50, we have

4 x $5.00 =	$20.00	value of ammonia in 1 ton
8 x $1.00 =	8.00	value of phosphoric acid in 1 ton
5 x $1.50 =	7.50	value of potash in 1 ton
	$35.50	value of fertilizer in 1 ton

TABLES

The tabes on the following pages are the result of the analysis of fertilizers which have been sampled in various parts of the State from July, 1922, to January, 1923. The columns marked "Found" gives the analysis of the fertilizers as determined in our laboratories, while the columns marked "Guaranteed" gives the analysis guaranteed by the manufacturers of the fertilizers. Next to the last column in the tables are found the values of the fertilizers based on our analysis, while the last column gives the values based on the analysis guaranteed by the manufacturer.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	American Agricultural Chemical C	**o., Balto., Md.**										
44188	Acid Phosphate 14%	Baltimore	.....	.....	.....	.....	**1.50**	.....	**14.00**	14.00	**$14.30**	$14.00
44159	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	**1.35**	.....	**15.65**	16.00	**15.92**	16.00
44162	Basic Lime Phosphate	Baltimore	.....	.....	.....	.....	**2.25**	1.00	**12.85**	13.00	**13.30**	13.20
44340	Big Crop Phosphate	Baltimore	.....	.....	**5.20**	5.00	**.95**	.....	**8.10**	8.00	**16.09**	15.50
44341	Complete Compound	Baltimore	.....	.....	**3.80**	5.00	**1.05**	.....	**8.10**	8.00	**14.01**	15.50
44303	Coon Brand Guano	Baltimore	**1.38**	1.00	**2.80**	2.00	**1.40**	.....	**8.80**	9.00	**20.18**	17.00
44155	Early Truck Grower	Baltimore	**5.49**	5.00	**5.00**	5.00	**1.35**	.....	**6.75**	7.00	**41.97**	39.50
44156	Fine Ground Bone	Baltimore	**2.73**	3.00	.....	.....	***20.70**	***22.88**	.....	.....	**26.07**	28.73
44394	Fish Guano 1916	Baltimore	**1.14**	1.00	**1.32**	1.00	**1.30**	.....	**8.10**	8.00	**16.04**	14.50
44304	Ground Tankage	Baltimore	**8.91**	9.00	.....	.....	***9.95**	***9.15**	.....	.....	**50.52**	50.49
44274	Kainit	Baltimore	.....	.....	**11.04**	12.40	.....	.....	.....	.....	.....	.....
44288	Matchless Potash Manure	Upper Marlboro	**2.08**	2.00	**2.16**	2.00	**1.60**	.....	**8.15**	8.00	**22.11**	21.00
44275	Muriate of Potash	Baltimore	.....	.....	**52.50**	48.00	.....	.....	.....	.....	.....	.....
44436	Muriate of Potash	Baltimore	.....	.....	**49.92**	48.00	.....	.....	.....	.....	.....	.....
44163	Nitrate of Soda	Baltimore	**19.06**	18.23	.....	.....	.....	.....	.....	.....	.....	.....
44210	Pathfinder 1920	Baltimore	**1.09**	1.00	**3.00**	3.00	**1.75**	.....	**9.85**	9.00	**20.15**	18.50
44289	Peerless Vegetable & Gr. Grower	Upper Marlboro	**2.00**	2.00	**5.32**	5.00	**1.55**	.....	**8.25**	8.00	**26.54**	25.50
44189	Pure Bone Meal	Baltimore	**4.74**	4.50	.....	.....	***24.50**	***21.50**	.....	.....	**38.40**	35.40
44437	Pure Bone Meal	Baltimore	**4.66**	4.50	.....	.....	***24.30**	***21.51**	.....	.....	**37.88**	35.41
44305	Red Dragon	Baltimore	**2.12**	2.00	**2.20**	2.00	**1.60**	.....	**11.65**	12.00	**25.87**	25.00
44164	Sulphate of Potash	Baltimore	.....	.....	**50.00**	50.00	.....	.....	.....	.....	.....	.....
44165	Three Star Phosphate & Potash	Baltimore	.....	.....	**3.84**	4.00	**1.35**	.....	**10.25**	10.00	**16.28**	16.00

44165	Three Star Phosphate & Potash.	Baltimore	.....	.....	3.84	4.00	1.35	.....	10.25	10.00	16.28	16.00

	American Agricultural Co., Cont.												
44429	Tip Top Fertilizer	Baltimore	1.09	1.00	3.00	3.00	1.15	.....	8.85	8.00	19.03	17.50
44375	Victor Compound	Baltimore	2.20	2.00	5.04	5.00	1.10	.....	8.20	8.00	26.98	25.50
44211	Victory Phosphate & Potash	Baltimore	.....	.....	4.38	5.00	.65	.....	12.25	12.00	18.95	19.50
	A. A. C. Co. (Alexandria), Balto., Md.												
44395	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.05	.....	15.45	16.00	15.66	16.00
44306	Superior Crop Grower	Baltimore	1.08	1.00	3.40	3.00	.60	.....	8.80	9.00	19.42	18.50
	A. A. C. Co. (Canton), Balto., Md.												
44416	Baker's Fish Guano	Sharptown	2.08	2.00	2.36	2.00	1.20	.....	8.00	8.00	22.18	21.00
44342	Baker's Spec. Wht., Corn, Grass	Baltimore	1.15	1.00	2.04	2.00	1.15	.....	9.00	9.00	18.04	17.00
44376	Baker's Standard Guano	Baltimore	2.13	2.00	3.00	3.00	1.55	.....	8.05	8.00	23.51	22.50
44350	Harrow Brand Crop Grower	Baltimore	1.14	1.00	1.04	1.00	1.70	.....	8.15	8.00	15.75	14.50
44276	Resurgam Guano	Baltimore	1.11	1.00	4.56	4.00	1.95	.....	7.70	8.00	20.48	19.00
	A. A. C. Co. (Copes), Balto., Md.												
44307	Acid Phosphate H. G.	Baltimore	.....	.....	.....	.....	1.05	.....	16.10	16.00	16.31	16.00
44308	Potato, Corn & Tobacco	Baltimore	2.12	2.00	4.04	4.00	1.90	.....	8.20	8.00	25.24	24.00
44309	Special Phosphate	Baltimore	1.02	1.00	3.12	3.00	.60	.....	8.95	9.00	18.85	18.50
44397	Try Me Fertilizer	Baltimore	2.13	2.00	2.04	2.00	1.45	.....	8.65	8.00	22.65	21.00
	A. A. C. Co. (Detrick), Balto., Md.												
44154	Kangaroo Komplete Kompound	Baltimore	2.13	2.00	3.00	3.00	1.70	.....	8.60	8.00	24.09	22.50
44384	Quickstep Fertilizer	Baltimore	3.36	3.00	4.06	4.00	1.05	.....	8.25	8.00	31.35	29.00
44277	Special Ammoniated Compound	Baltimore	1.13	1.00	1.00	1.00	1.80	.....	8.55	8.00	16.06	14.50
44310	Standard Potash Fertilizer	Baltimore	1.02	1.00	3.00	3.00	.75	.....	8.85	9.00	18.60	18.50
	A. A. C. Co. (W. S. Farmer), Balto., Md.												
44311	Fish Mixture	Baltimore	2.05	2.00	2.08	2.00	1.40	.....	8.65	8.00	22.30	21.00
44385	Harvest Queen	Baltimore	1.14	1.00	3.44	3.00	.95	.....	9.45	9.00	20.50	18.50
44166	H. G. Super Phosphate	Baltimore	.....	.....	.....	.....	1.65	.....	16.05	16.00	16.38	16.00
44377	Potash Guano	Baltimore	1.14	1.00	4.24	4.00	1.35	.....	8.40	8.00	20.73	19.00
44312	Standard Phosphate	Baltimore	2.12	2.00	4.04	4.00	2.00	.....	8.25	8.00	25.31	24.00
	A. A. C. Co. (S. M. Hess & Bro.), Balto., Md.												
44403	Ammoniated Superphosphate	Sharptown	2.47	2.00	2.28	2.00	1.15	.....	8.10	8.00	24.10	21.00
44404	5-8-0 Fertilizer	Sharptown	5.36	5.00	.....	.....	1.30	.....	8.05	8.00	35.11	33.00
44405	Keystone Phosphate	Sharptown	1.40	1.00	1.00	1.00	1.20	.....	8.00	8.00	16.74	14.50
44278	Special Compound	Baltimore	1.01	1.00	4.04	4.00	2.00	.....	8.10	8.00	19.61	19.00
	A. A. C. Co. (Lazaretto), Balto., Md.												
44313	Big Crop Grower	Baltimore	2.10	2.00	2.04	2.00	1.20	.....	9.00	8.00	22.80	21.00
44190	Farmers' Choice Brand	Baltimore	1.35	1.00	2.00	2.00	1.40	.....	8.55	8.00	18.58	16.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	A. A. C. Co. (Lazaretto), Con't.											
44212	Red Dog Guano	Baltimore	2.13	2.00	4.08	4.00	1.55		9.30	8.00	$26.38	$24.00
	A. A. C. Co. (Listers), Balto., Md.											
44314	Acid Phosphate, H. G.	Baltimore					1.05		16.55	16.00	16.76	16.00
44315	Atlas Brand Alkaline Fert.	Baltimore			5.16	5.00	.90		12.00	12.00	19.92	19.50
44176	Big Four Fertilizer	Laurel	2.01	2.00	5.08	5.00	1.90		7.80	8.00	25.85	25.50
44191	Fish Brand Fertilizer	Baltimore	1.37	1.00	2.04	2.00	1.75		8.95	9.00	19.21	17.00
44316	Golden Sheaf	Baltimore	1.47	1.00	1.12	1.00	1.75		8.55	8.00	17.93	14.50
44177	Harvest Queen Phosphate	Laurel	1.06	1.00	3.12	3.00	1.80		9.00	9.00	19.34	18.50
44224	Lime Phosphate	Lineboro					1.85	1.00	12.85	13.00	13.22	13.20
44357	Phosphoric Acid & Potash	Rocky Ridge			4.48	4.00	.95		10.00	10.00	16.91	16.00
44386	Potash Mixture	Baltimore			5.16	5.00	.75		8.05	8.00	15.94	15.50
44290	Special Wheat Fertilizer	Rock Point	2.12	2.00	3.36	3.00	1.75		8.10	8.00	24.09	22.50
44317	Success Fertilizer	Baltimore	2.01	2.00	2.12	2.00	1.65		8.55	8.00	22.11	21.00
	A. A. C. Co. (Patapsco Guano Co.), Balto., Md.											
44192	Acid Phosphate, H. G.	Baltimore					1.50		15.85	16.00	16.15	16.00
44213	Big Chief Brand with Potash	Baltimore	1.13	1.00	3.00	3.00	1.75		9.20	9.00	19.70	18.50
44201	Blood, Bone & Potash	Baltimore	1.09	1.00	1.28	1.00	1.65		8.25	8.00	15.95	14.50
44202	Coon Brand Guano	Baltimore	1.28	1.00	2.16	2.00	1.50		9.00	9.00	18.94	17.00
44258	Crow Brand Lime Phosphate	Keedysville					3.55	1.00	12.55	13.00	13.26	13.20
44215	Guano	Baltimore	2.10	2.00	2.00	2.00	1.60		8.90	8.00	22.72	21.00
44398	10% Potash Fertilizer	Baltimore	2.01	2.00	9.28	10.00	1.35		8.35	8.00	32.59	33.00
44387	Phospho Potash	Baltimore			5.56	5.00	.70		12.05	12.00	20.53	19.50

44335	Potash Mixture	Baltimore			3.56	4.00	.80		10.15	10.00	15.65	16.00
44203	Sea Gull Guano	Baltimore	1.08	1.00	1.20	1.00	1.60		8.05	8.00	15.57	14.50
44399	Soluble Phosphate & Potash	Baltimore			2.28	2.00	1.15		10.35	10.00	14.00	13.00
	A. A. C. Co. (Pollock), Balto., Md.											
44214	Corn, Wheat & Tomato Guano	Baltimore	1.01	1.00	1.28	1.00	1.60		7.80	8.00	15.09	14.50
44378	Corn, Wheat & Tomato Guano	Baltimore	1.35	1.00	1.60	1.00	1.80		8.45	8.00	17.96	14.50
44432	H. G. Super Phosphate	Baltimore					.85		16.50	16.00	16.67	16.00
44216	Special Wheat & Corn	Baltimore	1.13	1.00	2.16	2.00	1.45		7.95	8.00	17.13	16.00
	A. A. C. Co. (Susquehanna), Balto., Md.											
44388	Choice	Baltimore	1.23	1.00	2.02	2.00	1.45		9.50	8.00	18.97	16.00
44336	Grain & Grass Producer	Baltimore			3.56	3.00	1.30		11.75	12.00	17.35	16.50
44217	XXV Phosphate	Baltimore	1.11	1.00	1.00	1.00	1.80		8.70	8.00	16.11	14.50
	A. A. C. Co. (Wooldridge), Balto., Md.											
44193	Acid Phosphate, H. G.	Baltimore					1.60		15.80	16.00	16.12	16.00
44358	Ammoniated Phosphate	Woodsboro	1.13	1.00	1.12	1.00	1.55		8.45	8.00	16.09	14.50
44218	Champion Stag Phosphate	Baltimore	1.08	1.00	2.04	2.00	1.55		9.00	9.00	17.77	17.00
44167	Chieftain Phosphate	Baltimore	2.12	2.00	2.16	2.00	1.70		7.70	8.00	21.88	21.00
44389	Clover Blossom	Baltimore	1.23	1.00	1.92	2.00	1.40		9.35	8.00	18.66	16.00
44337	Farmers' Favorite Cereal Comp.	Baltimore	1.13	1.00	1.12	1.00	1.15		7.50	7.00	15.06	13.50
44390	Fish Mixture No. 2	Baltimore	2.00	2.00	2.10	2.00	1.10		8.95	8.00	22.32	21.00
44319	Grain & Grass Producer	Baltimore			4.08	4.00	.90		10.20	10.00	16.50	16.00
44320	Liberty Bell Potash Mixture	Baltimore			3.20	3.00	1.70		12.25	12.00	17.39	16.50
44318	Lime Phosphate	Baltimore					1.90		13.60	13.00	13.98	13.00
44321	No. 2 Phosphate & Potash	Baltimore			4.56	5.00	1.10		8.70	8.00	15.76	15.50
44359	Old Sledge Phosphate	Woodsboro			5.04	5.00	1.45		12.10	12.00	19.95	19.50
44379	Surety Crop Grower	Baltimore	1.25	1.00	3.12	3.00	.90		9.40	9.00	20.51	18.50
44322	Triumph Brand Phosphate	Baltimore	2.12	2.00	3.04	3.00	1.50		8.15	8.00	23.61	22.50
	A. A. C. Co. (Zell), Balto., Md.											
44168	Acid Phosphate 16%	Baltimore					1.20		15.70	16.00	15.94	16.00
44425	Economizer Phosphate	Cumberland	1.38	1.00	2.08	2.00	2.00		8.35	8.00	18.77	16.00
44194	Hustler Phosphate	Laurel	1.13	1.00	3.00	3.00	1.60		9.25	9.00	19.72	18.50
	American Fertilizing Co., Baltimore, Md.											
44351	Acid Phosphate	Baltimore					1.25		14.45	14.00	14.70	14.00
44219	Acid Phosphate, H. G.	Baltimore					.85		16.25	16.00	16.42	16.00
44279	Double Extra Phosphate & Potash	Baltimore			5.24	5.00	1.35		11.35	12.00	19.48	19.50
44158	Early Trucker	Baltimore	5.02	5.00	7.04	5.00	1.75		6.25	6.00	42.26	38.50
44204	Fish & Bone	Baltimore	2.01	2.00	3.64	3.00	2.40		7.80	8.00	23.79	22.50
44323	Fish & Bone Special	Baltimore	2.37	2.00			2.55		11.45	11.00	23.81	21.00

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	American Fertilizing Co., Con't.											
44352	Formula for Wheat & Corn....	Baltimore	.....	.....	5.16	5.00	.75	.....	11.15	10.00	$19.04	$17.50
44220	Grain & Grass Grower.....	Baltimore	1.13	1.00	2.36	3.00	2.00	.....	9.60	9.00	19.19	18.50
44153	Prize Guano.....	Preston (S. W.)...	2.41	2.00	9.16	10.00	1.65	1.00	8.08	8.00	34.20	33.20
44343	Special Best Crop Formula.....	Baltimore	2.17	2.00	6.40	6.00	2.15	.....	10.25	10.00	31.13	29.00
44280	Spec. Formula for Grain & Grass	Baltimore	.73	.50	2.00	2.00	1.70	.....	9.10	8.00	16.09	13.50
	Armour Fertilizer Works, Baltimore, Md.											
44169	Big Crop Acid Phosphate.....	Baltimore	.....	.....	.....	.....	.60	.....	16.00	16.00	16.12	16.00
44205	Big Crop Bone Mixture.....	Baltimore	2.01	2.00	3.08	3.00	2.10	.....	8.95	9.00	24.04	23.50
44170	Big Crop 4-8-4.....	Baltimore	3.36	4.00	4.04	4.00	.70	.....	8.00	8.00	31.00	34.00
44360	Big Crop Fertilizer 1-10-4.....	Walkersville	1.06	1.00	4.00	4.00	.35	.....	10.30	10.00	21.67	21.00
44197	Big Crop Fertilizer 1-10-4.....	Walkersville	1.09	1.00	3.80	4.00	.65	.....	9.75	10.00	21.03	21.00
44157	Big Crop 7-6-5.....	Baltimore	6.11	7.00	5.00	5.00	.80	.....	6.70	6.00	44.91	48.50
44171	Big Crop 10-5.....	Baltimore	.....	.....	4.88	5.00	.50	.....	9.90	10.00	17.32	17.50
44172	Big Crop 3-8-3.....	Baltimore	2.71	3.00	3.24	3.00	.70	.....	7.80	8.00	26.15	27.50
44281	Big Crop 2-8-5.....	Baltimore	2.17	2.00	5.16	5.00	.80	.....	8.05	8.00	26.80	25.50
44435	Big Crop 2-10-4.....	Baltimore	2.12	2.00	4.08	4.00	.55	.....	10.15	10.00	26.98	26.00
44361	Big Crop Fertilizer 2-10-2.....	Walkersville	2.00	2.00	2.12	2.00	.60	.....	10.20	10.00	23.50	23.00
44400	Big Crop 2-12-2.....	Baltimore	2.10	2.00	2.22	2.00	1.30	.....	12.55	12.00	26.64	25.00
44324	Big Crop 12-5.....	Baltimore	.....	.....	5.24	5.00	.20	.....	12.20	12.00	20.10	19.50
44353	Crop Grower.....	Baltimore	1.08	1.00	2.00	2.00	.85	.....	8.30	8.00	16.87	16.00
44206	Farmers' Choice.....	Baltimore	1.16	1.00	3.12	3.00	.90	.....	8.60	9.00	19.26	18.50
44160	Grain Grower.....	Annapolis	2.13	2.00	2.20	2.00	.60	.....	8.65	8.00	22.72	21.00
44325	Lime Phosphate.....	Baltimore	.....	.....	.....	.....	1.30	.....	12.95	13.00	13.21	13.00

44325	Lime Phosphate	Baltimore					1.30		12.95	13.00	13.21	13.00
44207	Royal Ammoniated	Baltimore	1.02	1.00	4.04	4.00	.70		7.80	8.00	19.10	19.00
44326	Wheat, Corn & Oats	Baltimore	1.06	1.00	1.32	1.00	.80		7.80	7.00	15.24	13.50
44327	Wheat & Grass Grower	Baltimore	1.06	1.00	1.36	1.00	.85		8.85	8.00	16.36	14.50
	Associated Chemical Co., Hagerstown, Md.											
44295	Muriate of Potash	Fallston			55.40	50.00						
	Baltimore Fertilizer Co., Baltimore, Md.											
44291	Honest Acid Phosphate 16%	La Plata					1.40		16.95	16.00	17.23	16.00
44417	Honest Acid Phosphate 16%	Glyndon					.35	1.00	17.95	16.00	18.02	16.20
44296	Honest Ammoniated Bone	Bel Air	2.30	2.00	3.12	2.00	.85	1.00	8.10	8.00	24.45	21.20
44418	Honest Ammoniated Bone	Fallston	2.08	2.00	2.20	2.00	1.00		8.35	8.00	22.25	21.00
44292	Honest Crop Grower	Lothian	1.13	1.00	1.08	1.00	1.55		8.45	8.00	16.03	14.50
44419	Honest Crop Grower	Baltimore	1.08	1.00	1.02	1.00	1.20		8.25	8.00	15.42	14.50
44225	Honest 1-9-3	Hampstead	1.08	1.00	3.24	3.00	1.40		9.30	9.00	19.84	18.50
44420	Honest 1-9-3	Glyndon	1.01	1.00	3.16	3.00	.75		9.90	9.00	19.84	18.50
44421	Honest 1-9-3	La Plata	1.11	1.00	2.92	3.00	.95		9.65	9.00	19.77	18.50
44226	Honest 10-5	Boyds			5.04	5.00	.95		10.45	10.00	18.20	17.50
44297	Honest 2-8-4	Glyndon	2.12	2.00	4.36	4.00	.95		8.70	8.00	26.03	24.00
44422	Honest 2-8-4	Fallston	1.88	2.00	3.90	4.00	1.15		8.25	8.00	23.73	24.00
44282	Old Honesty	Baltimore	.61	.50	2.00	2.00	.60		8.75	8.00	14.92	13.50
44424	Old Honesty	La Plata	.99	.50	2.96	2.00	.95		8.25	8.00	17.83	13.50
44423	Old Honesty	Glyndon	.58	.50	2.76	2.00	.80		8.40	8.00	15.60	13.50
	Baltimore Pulverizing Co., Baltimore, Md.											
44338	Acid Phosphate 16%	Baltimore					.85		16.50	16.00	16.67	16.00
44401	Corn & Grain Grower	Baltimore			4.40	4.00	1.15		12.10	12.00	18.93	18.00
44221	Harvest King	Baltimore	1.14	1.00	2.36	2.00	.95		10.25	10.00	19.68	18.00
44430	Ideal Fertilizer	Baltimore	2.80	2.00	4.76	5.00	1.00		8.00	8.00	29.34	25.50
44328	Special Spring & Fall Mixture	Baltimore			2.76	2.00	.55		8.50	8.00	12.75	11.00
	Baugh & Sons Co., Baltimore, Md.											
44178	Acid Phosphate 14%	Baltimore					.90		15.50	14.00	15.68	14.00
44179	Acid Phosphate 16%	Baltimore					.80		16.10	16.00	16.26	16.00
44380	Ammoniated Superphosphate	Baltimore	1.77	1.25			1.75		10.55	10.00	19.75	16.25
44222	Animal Base & Potash Comp	Baltimore	1.96	2.00	2.20	2.00	1.20		8.20	8.00	21.54	21.00
44180	Commercial Superphosphate	Baltimore	2.00	2.00	8.16	10.00	1.45		8.60	8.00	31.13	33.00
44227	Complete Animal Base Fert	Woodsboro	2.08	2.00	5.08	5.00	1.90		8.20	8.00	26.60	25.50
44362	Double Eagle Phosphate	Emmitsburg	2.34	2.00	4.04	4.00	1.75		10.05	10.00	28.16	26.00
44329	Durable Plant Food	Baltimore	1.13	1.00	3.36	3.00	1.35		8.85	8.00	19.81	17.50
44391	Economical Crop Producer	Baltimore	1.28	1.00	2.08	2.00	1.20		8.30	8.00	18.06	16.00
44198	Excelsior Guano	Monrovia	1.13	1.00	4.16	4.00	1.45		8.00	8.00	20.18	19.00

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							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Baugh & Sons Co., Con't.											
44298	Fish Bone Guano	Conowingo	2.15	2.00	1.28	1.00	1.40	.....	10.05	10.00	$23.00	$21.50
44199	General Crop Grower	Monrovia	1.11	1.00	1.16	1.00	1.30	.....	8.20	8.00	15.75	14.50
44454	Half & Half Mixture	Baltimore	1.81	1.50	5.16	5.00	6.42	.....	10.83	10.00	28.90	25.00
44344	H. G. Tankage	Baltimore	8.46	8.00	.....	.....	*12.50	*4.00	.....	.....	49.80	42.40
44381	Kainit	Baltimore	.....	.....	12.32	12.40	.....	.....	.....	.....	.....	.....
44283	Lime & Phosphate	Baltimore	.....	.....	.....	.....	2.05	.....	12.35	13.00	12.76	13.00
44345	Muriate of Potash	Baltimore	.....	.....	48.80	48.00	.....	.....	.....	.....	.....	.....
44161	Nitrate of Soda	Annapolis	18.64	18.50	.....	.....	.....	.....	.....	.....	.....	.....
44363	Phosphate & Potash Mixture	Middletown	.....	.....	4.36	4.00	1.15	.....	10.05	10.00	16.82	16.00
44173	Potato & Truck Special	Baltimore	2.82	4.00	6.40	6.00	2.45	.....	8.15	8.00	32.34	37.00
44402	Pure Bone & Muriate of Pot.—	Baltimore	2.63	2.50	8.92	5.00	*18.25	*20.00	.....	.....	37.48	32.00
44174	Raw Bone Meal	Baltimore	4.64	4.50	.....	.....	*21.00	*21.50	.....	.....	35.80	35.40
44426	Special Mixture	Mt. Airy	.96	.50	4.56	5.00	1.85	.....	13.95	12.00	25.96	22.00
44354	10-4 Phosphate & Potash Mix...	Baltimore	.....	.....	4.96	4.00	1.00	.....	10.50	10.00	18.14	16.00
44453	12-5 Phosphate & Potash Mix...	Baltimore	.....	.....	5.08	5.00	1.20	.....	12.40	12.00	20.26	19.50
44181	Wheat Fertilizer	Baltimore	2.13	2.00	2.16	2.00	1.75	.....	8.00	8.00	22.24	21.00
	Beckley Fertilizer Co., Half Way, Md.											
44260	Bone Mixture	Half Way	1.60	1.50	.....	.....	1.30	.....	13.80	14.00	22.06	21.50
44259	Dissolved Phosphate	Half Way	.....	.....	.....	.....	.80	.....	16.90	16.00	17.06	16.00
44261	12 & 5	Half Way	.....	.....	5.36	5.00	.60	.....	12.50	12.00	20.66	19.50

	N. T. Bennett, New Windsor, Md.											
44228	Butcher House Phosphate	New Windsor	1.04	1.00	4.00	3.00	1.60		11.65	9.00	23.17	18.50
44229	Wheat Grower Phosphate	New Windsor	1.08	1.00	2.56	2.00	2.75		9.70	8.00	19.49	16.00
	Herbert Bryant's Son, Alexandria, Va.											
44230	Acid Phosphate, H. G	Dickerson					.25		17.85	16.00	17.90	16.00
44231	Economy Comp. of Lime Phos	Rockville					1.20		12.80	12.00	13.04	12.00
44232	Empress Ammoniated Bone	Washington Grove	1.08	1.00	1.76	1.00	.70		9.20	8.00	17.38	14.50
44433	Genuine Fish Bone & Potash	Dickerson	2.46	2.00	2.40	2.00	1.10		9.05	9.00	25.17	22.00
	Central Chemical Co., Hagerstown, Md.											
44370	Gro-All Commonwealth	Hagerstown			2.04	2.00	.60		10.05	10.00	13.23	13.00
44200	Gro-All Crown Jewel	Monrovia	1.02	1.00	2.88	3.00	.55		9.25	9.00	18.78	18.50
44183	Gro-All Dissolved Phos. 16%	Baltimore					1.15		15.95	16.00	16.18	16.00
44184	Gro-All Dissolved Phos. 16%	Baltimore					1.15		15.55	16.00	15.78	16.00
44371	Gro-All Empire	Frederick	2.00	2.00	9.84	10.00	.30		9.00	8.00	33.82	33.00
44372	Gro-All Excelsior	Hagerstown	2.12	2.00	4.52	4.00	.70		8.20	8.00	25.72	24.00
44262	Gro-All Farmers' Compound	Kump	1.57	1.50			1.30		13.70	14.00	21.81	21.50
44427	Gro-All Fish & Potash Compound	Hancock	1.64	1.25	2.00	2.00	1.15		8.15	8.00	19.58	17.25
44364	Gro-All Golden Sheaf	Myersville	1.08	1.00	1.04	1.00	.40		8.70	8.00	15.74	14.50
44263	Gro-All Grain & Grass Grower	Myersville	2.05	2.00	2.04	2.00	.90		12.20	12.00	25.69	25.00
44365	Gro-All Grain Special	Myersville	1.14	1.00	4.00	4.00	.70		8.30	8.00	20.14	19.00
44366	Gro-All Pioneer	Myersville			5.60	5.00	.50		7.55	8.00	16.05	15.50
44373	Gro-All Planters' Mixture	Frederick	1.14	1.00	5.60	6.00	.70		8.20	8.00	22.44	22.00
44264	Gro-All Potash Special	Kump			5.04	5.00	.70		12.35	12.00	20.05	19.50
44374	Gro-All Special Formula	Hagerstown	2.08	1.50	5.72	5.00	.45		12.30	12.00	31.37	27.00
44265	Gro-All Super Fish	Smithsburg	2.06	2.00	6.40	6.00	1.30		11.85	12.00	32.01	31.00
44208	Gro-All Valley Mixture	Baltimore	2.00	2.00	2.16	2.00	.85		8.20	8.00	21.61	21.00
	Crisfield Fertilizer Co., Crisfield, Md.											
44406	Ground Crab Scraps	Crisfield	5.27	4.26			*4.10	*2.58			28.81	22.85
	Dorchester Fertilizer & Lime Co., Cambridge, Md.											
44407	Acid Phosphate 16%	Cambridge					.85		15.85	16.00	16.02	16.00
44408	Grain Grower	Cambridge			5.36	5.00	.70		9.50	10.00	17.68	17.58
44409	Lime Phosphate	Cambridge	.75	.17	3.12	.13	1.05		9.50	8.00	18.14	9.05
44410	Old Dorset	Cambridge	.90	1.00	3.20	4.00	1.20		9.20	8.00	18.74	19.00
44411	Old Glory	Cambridge			4.20	5.00	1.10		12.00	12.00	18.52	19.50
44412	Our No. 2	Cambridge	1.59	2.00	2.00	2.00	1.30		9.40	8.00	20.61	21.00
44413	Our Wheat Grower	Cambridge	1.01	1.00	3.20	3.00	.95		9.40	9.00	19.44	18.50
	Dumont Fertilizer Co., Philadelphia, Pa.											
44428	Acid Phosphate	Mt. Airy					.45		17.15	16.00	17.24	16.00

*Total Phosphoric Acid.

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							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Dumont Fertilizer Co., Philadelphia, Pa., Con't.											
44431	1-8-4	Baltimore	1.06	1.00	4.20	4.00	.70	.....	8.20	8.00	$19.94	$19.00
44382	1-9-3	Baltimore	1.66	1.00	4.04	3.00	.90	.....	10.15	9.00	24.69	18.50
44441	1-9-3	Baltimore	1.79	1.00	2.80	3.00	.70	.....	10.05	9.00	23.34	18.50
44346	1-10-5	Baltimore	1.11	1.00	6.92	5.00	.75	.....	11.40	10.00	27.48	22.50
44299	12-5	Baltimore	.....	.....	5.04	5.00	1.85	.....	12.05	12.00	19.98	19.50
	Edelen Bros., Baltimore, Md.											
44293	Wheat & Grain Mixture	Rock Point	1.11	1.00	1.04	1.00	1.25	.....	8.25	8.00	15.61	14.50
	Farmers Fertilizer & Feed Co., Westminster, Md.											
44233	Acid Phosphate 16%	Westminster	.....	.....	.....	.....	.50	.....	17.40	16.00	17.50	16.00
44234	High Grade Fertilizer	Westminster	1.84	2.00	3.00	3.00	.90	1.00	12.05	11.00	25.93	25.70
44235	No. 2 Phosphate	Westminster	1.95	2.00	3.60	3.00	1.60	1.00	9.35	9.00	24.82	23.70
44236	No. 3 Phosphate	Westminster	1.50	1.50	3.00	3.00	.80	1.00	9.60	8.00	21.76	20.20
44237	XX Phosphate	New Windsor	1.08	1.00	3.20	3.00	.85	1.00	10.15	9.00	20.52	18.70
44238	XXX Fertilizer	Westminster	1.01	1.00	4.12	4.00	1.05	1.00	9.75	8.00	21.19	19.20
	Farmers & Planters Co., Salisbury, Md.											
44250	Fish Mixture	Salisbury	2.13	2.00	2.24	2.00	2.65	.....	7.90	8.00	22.44	21.00
44251	General Crop Grower	Salisbury	1.11	1.00	2.04	2.00	1.30	.....	10.40	10.00	19.27	18.00
44252	Special Fish Mixture	Salisbury	2.01	2.00	5.40	5.00	1.95	.....	9.05	8.00	27.59	25.50
44253	Special Potash Mixture	Salisbury	.....	.....	4.24	5.00	1.00	.....	11.70	12.00	18.26	19.50
44254	Truckers' Mixture	Salisbury	3.00	3.00	3.60	4.00	1.25	.....	10.55	8.00	31.20	29.00
44414	Wright's Double Potash Mixture	Salisbury	.....	.....	4.44	4.00	1.00	.....	9.20	9.00	16.06	15.00
	F. Mehring Fertilizer Works, Inc.,	**Littlestown, Pa.**										
44239	Big Four Crop Grower	Bruceville	1.14	1.00	3.00	2.00	.65	1.00	10.10	9.00	20.42	17.20

	F. Mehring Fertilizer Works, Inc.,	**Littlestown, Pa.**										
44239	Big Four Crop Grower	Bruceville	1.14	1.00	3.00	2.00	.65	1.00	10.10	9.00	20.43	17.20
44439	Big Four Crop Grower	Taneytown	1.25	1.00	2.52	2.00	.55		10.00	9.00	20.14	17.00
44266	Mammoth Truck Grower	Taneytown	2.03	2.00	5.04	5.00	.65		8.75	8.00	29.59	25.50
44267	Potash Mixture	Taneytown			8.16	8.00	.70		10.05	10.00	22.43	22.00
44240	Potash Mixture	Bruceville			4.28	5.00	.70		10.10	10.00	16.66	17.50
	Griffith & Boyd Co., Baltimore, Md.											
44330	Acid Phosphate, H. G.	Baltimore					.75		16.10	16.00	16.25	16.00
44284	Farmers' Queen	Baltimore	1.23	1.00	2.60	3.00	1.00		9.90	9.00	20.15	18.50
44355	Fish, Blood & Potash	Baltimore	1.76	1.75	2.00	2.00	.85		7.85	7.00	19.82	18.75
44331	Fish & Blood Mixture	Baltimore	1.57	1.75			1.05		10.65	7.00	18.71	15.75
44223	Fish & Potash Guano	Baltimore	1.76	1.75	3.04	3.00	1.05		7.35	7.00	20.92	20.25
44434	General Crop Grower	Baltimore	2.00	2.00	2.48	2.00	1.05		9.75	8.00	23.68	21.00
44195	General Crop Grower	Baltimore	1.71	2.00	3.28	2.00	1.95		7.35	8.00	21.21	21.00
44367	Genuine German Kainit	Myersville			12.48	12.40						
44332	Peerless Mixture	Baltimore	1.26	.50			2.40		9.60	8.00	16.38	10.50
44368	Peerless Fertilizer	Myersville	.78	.50	2.12	2.00	.80		8.05	8.00	15.29	13.50
44185	Pure Fine Ground Bone Meal	Baltimore	4.06	4.00			*19.80	*20.00			32.18	32.00
44369	Reliable Crop Grower	Myersville	1.09	1.00	1.04	1.00	.90		7.95	8.00	15.14	14.50
44300	Soft Ground Bone Meal	Colora	3.12	3.00			*9.40	*11.00			21.24	21.60
44347	Soluble 12-5	Baltimore			5.52	5.00	.70		12.30	12.00	20.72	19.50
44339	Special Formula	Baltimore	2.03	2.00	4.40	4.00	.85		10.05	10.00	26.97	26.00
44392	Special Grain Grower	Baltimore			2.08	2.00	.25		10.35	10.00	13.52	13.00
44196	Special Guano	Laurel	2.29	2.00	5.28	5.00	.95		8.00	8.00	27.56	25.50
44209	XX Potash Manure	Baltimore			5.04	5.00	.70		10.80	10.00	18.50	17.50
	Griffith & Turner Co., Baltimore, Md.											
44186	Animal Bone Phosphate	Baltimore	2.93	2.50	1.72	1.50	.90		9.55	10.00	26.96	24.75
	Hampstead Fertilizer Co., Hampstead, Md.											
44241	Acid Phosphate 16%	Hampstead					1.35		16.55	16.00	16.82	16.00
44242	1-8-4	Hampstead	1.25	1.00	4.32	4.00	1.65		9.25	8.00	22.31	19.00
44243	1-8-2	Hampstead	1.13	1.00	2.40	2.00	1.05		8.85	8.00	18.31	16.00
44472	1-9-3	Hampstead (M. B. L.)	1.33	1.00	2.12	3.00	.85	.82	10.35	9.00	20.35	18.66
44244	2-8-4	Hampstead	2.03	2.00	5.16	4.00	.50		8.35	8.00	26.34	24.00
	J. G. Harr, Baltimore, Md.											
44301	Fish & Potash Mixture	Baltimore	2.24	2.00	3.40	2.00	2.85		9.35	8.00	26.22	21.00
44302	1-9-3 Mixture	Baltimore	1.04	1.00	3.08	3.00	1.45		9.25	9.00	19.36	18.50
	Horsey, Roe & Co., Greensboro, Md.											
44415	Acid Phosphate 16%	Greensboro					1.20		16.50	16.00	16.74	16.00
44255	Crop Grower	Greensboro	1.13	1.00	4.20	4.00	1.15		8.85	8.00	21.03	19.00

*Total Phosphoric Acid.

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							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Horsey, Roe & Co., Cont.											
44256	10-4	Greensboro			4.24	4.00	1.20		9.60	10.00	$16.20	$16.00
44257	12-5	Greensboro			6.40	5.00	1.15		12.05	12.00	21.88	19.50
44438	12-5	Greensboro			5.12	5.00	.50		13.00	12.00	20.78	19.50
	C. M. Horst, Hagerstown, Md.											
44268	Acid Phosphate 16%	Hagerstown					.80		17.90	16.00	18.06	16.00
44269	Farmers' Pride	Linwood	1.11	1.00	4.16	4.00	1.15		8.90	8.00	20.92	19.00
44270	Lime & Phosphate	Linwood					2.10		12.95	13.00	13.37	13.00
44271	Phosphate & Potash Mixture	Hagerstown			4.76	5.00	.65		12.45	12.00	19.72	19.50
44272	Spec. Grain & Grass Phosphate	Hagerstown	2.10	2.00	5.08	5.00	1.55		8.20	8.00	26.63	25.50
44273	Spec. Grain & Grass Producer	Linwood	2.08	2.00	5.12	5.00	1.55		8.00	8.00	26.39	25.50
	Hubbard Fertilizer Co., Baltimore, Md.											
44245	Acid Phosphate 16%	Woodsboro					1.60		16.45	16.00	16.77	16.00
44246	Alkaline 12-5	Woodbine			5.20	5.00	1.20		12.40	12.00	20.44	19.50
44285	Farmers' I. X. L.	Baltimore	2.05	2.00	2.36	2.00	3.85		6.80	8.00	21.36	21.00
44247	Fish Mixture	Woodbine	1.02	1.00	1.08	1.00	2.40		8.20	8.00	15.40	14.50
44356	H. G. Potash Mixture	Baltimore			5.04	4.00	.95		10.40	10.00	18.15	16.00
44333	Lime Phosphate	Baltimore					1.85		14.10	13.00	14.47	13.00
44187	Money Maker Fertilizer	Baltimore	2.08	2.00	5.00	5.00	1.90		7.70	8.00	25.98	25.50
44248	1-8-4 Fertilizer	Woodbine	.90	1.00	4.24	4.00	2.10		7.60	8.00	18.88	19.00
44294	1-8-3 Fertilizer	La Plata	1.13	1.00	3.08	3.00	.95		10.05	8.00	20.51	17.50
44249	Pure Raw Bone	Woodbine	4.54	4.50			*22.65	*22.50			36.29	36.00
44175	Yellow Wrapper	Baltimore	3.12	3.00	3.16	3.00	2.45		7.35	8.00	28.18	27.50
	M. P. Hubbard Co., Inc., Baltimore, Md.											
44348	Acme Guano	Baltimore	1.11	1.00	4.12	4.00	.75		8.25	8.00	20.13	18.00

44175	Yellow Wrapper	Baltimore	3.12	3.00	3.16	3.00	2.45		7.35	8.00	28.18	27.50
	M. P. Hubbard Co., Inc., Baltimore, Md.											
44348	Acme Guano	Baltimore	1.11	1.00	4.12	4.00	.75		8.25	8.00	20.13	19.00
44286	Dissolved Phosphate	Baltimore					.65		16.25	16.00	16.38	16.00
44383	Excelsior	Baltimore	1.33	1.00	3.64	2.00	.35		6.10	8.00	18.28	16.00
44287	German Kainit	Baltimore			11.84	12.00						
44334	Special 10-5	Baltimore			4.84	5.00	.75		10.25	10.00	17.66	17.50
44349	Special 2-8-5	Baltimore	2.01	2.00	5.08	5.00	1.15		8.30	8.00	26.20	25.50
44393	XXXX Phosphate & Potash	Baltimore			5.60	5.00	.45		12.65	12.00	21.14	19.50
	Lancaster Bone Fertilizer Co., Lancaster, Pa.											
44608	Favorite	Boonsboro	2.10	2.00	2.12	2.00	.70		8.45	8.00	22.27	21.00
	Maryland Milling & Supply Co., Sykesville, Md.											
44557	Acid Phosphate	Sykesville					.20		17.05	16.00	17.09	16.00
44558	Fish, Bone & Potash	Sykesville	1.16	1.00	2.68	2.00	1.10		11.45	8.00	21.49	16.00
44559	Phosphate & Potash	Sykesville			4.20	5.00	1.05		10.05	10.00	16.56	17.50
44560	Phosphate & Potash	Sykesville			4.08	5.00	.45		13.55	12.00	19.76	19.50
44561	Warfield's Special Mixture	Sykesville	1.14	1.00	4.00	4.00	.85		9.45	8.00	21.32	19.00
44562	Wheat & Grass Mixture	Sykesville	1.08	1.00	1.24	1.00	.45		9.05	8.00	16.40	14.50
	Massey & Kilbourne, Chestertown, Md.											
44585	Crop Producer Super Phosphate	Chestertown	1.14	1.00	3.60	3.00	.80		8.95	9.00	20.21	18.50
44666	10-5 Superphosphate	Chestertown			5.40	5.00	.65		11.20	10.00	19.43	17.50
44586	12 & 3	Chestertown			3.40	3.00	.80		13.05	12.00	18.31	16.50
44667	Trustworthy Superphosphate	Chestertown	2.03	2.00	4.78	5.00	.95		9.40	8.00	26.91	25.50
	Miller Fertilizer Co., Baltimore, Md.											
44645	Acid Phosphate	Graceham					1.35	.50	16.80	16.00	17.07	16.10
44515	Ammoniated Dissolved Bone	Laurel	2.03	2.00	2.16	2.00	.55	.50	8.15	8.00	21.65	21.10
44563	Club Brand	Lineboro	.61	.50	2.08	2.00	1.10		8.45	8.00	14.84	13.50
44471	Dorsey's Mixture	Jessups (C. H. C.)	2.29	2.25	2.48	2.25	1.70		9.60	10.00	25.11	24.63
44564	Farmers' Profit	Woodbine	2.15	2.00	4.12	4.00	.90		10.40	10.00	27.51	26.00
44565	Grain Grower	Woodbine	1.09	1.00	3.80	4.00	.75		9.15	8.00	20.45	19.00
44613	Harvest Queen	Baltimore	1.14	1.00	3.48	3.00	.80		9.65	9.00	20.73	18.50
44566	Hustler Phosphate	Woodbine	1.11	1.00	1.36	1.00	.65		8.40	8.00	16.12	14.50
44621	Standard Phosphate	Forest Hill	3.07	3.00	3.24	3.00	.85		8.90	8.00	29.28	27.50
44516	2-8-5	Laurel	2.03	2.00	5.08	5.00	.65		8.05	8.00	25.95	25.50
44567	12-5	Woodbine			5.40	5.00	.90		12.05	12.00	20.33	19.50
44646	Unexcelled	Walkersville	2.13	2.00	2.00	2.00	1.00	.50	10.30	10.00	24.15	23.10
44647	W. G. Phosphate	Graceham	.77	.50	1.52	1.00	.55	.50	8.05	7.00	14.29	11.10
44657	Wheat & Grass Grower	Baltimore	2.29	2.00	2.24	2.00	1.35	.50	12.75	12.00	27.83	25.10
	Nitrate Agencies Co., New York, N. Y.											
44668	Animal Tankage	Denton	9.25	10.00			*14.30	*4.58			54.83	52.75

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Nitrate Agencies Co., New York, N. Y., Con't.											
44634	Grain Mixture NACO Brand....	Baltimore	1.42	1.41	5.12	5.65	.30	.....	12.20	11.25	$27.04	$26.78
44518	Muriate of Potash.....	Baltimore	.....	.....	49.90	50.00	.....	.....	.....	.....	.....	.....
44669	Phospho Potash Mitxure.....	Denton	.....	.....	5.68	5.66	.25	.....	14.40	14.18	22.97	22.67
	G. Ober & Sons Co., Baltimore, Md.											
44502	Acid Phosphate, H. G.....	Baltimore	.....	.....	.....	.....	.75	.....	16.15	16.00	16.30	16.00
44568	Farmers' Mixture.....	New Windsor.....	1.59	1.00	2.24	2.00	.70	.....	9.30	9.00	20.75	17.00
44536	Golden Top Wht. & Corn Grower	Baltimore	1.40	1.00	3.16	3.00	.80	.....	9.30	9.00	21.20	18.50
44537	Independent Mixture.....	Baltimore	1.33	1.00	1.24	1.00	.85	.....	8.20	8.00	16.88	14.50
44503	Pure Raw Bone Meal.....	Baltimore	4.61	4.50	.....	.....	*19.10	*21.00	.....	.....	34.51	35.10
44628	Red Seal Corn & Wheat Guano	Baltimore	2.18	2.00	2.52	2.00	.60	.....	12.35	12.00	27.15	25.00
44514	Sol. Amm'd. Superphosphate....	Baltimore	2.03	2.00	2.20	2.00	1.26	.....	8.04	8.00	21.74	21.00
44538	Special Plant Food.....	Baltimore	2.01	2.00	5.08	5.00	1.25	.....	9.30	9.00	27.22	26.50
44614	Standard Potash Compound.....	Baltimore	.....	.....	6.56	6.00	1.10	.....	12.20	12.00	22.26	21.00
44546	Twelve & Five Potash Compound	Baltimore	.....	.....	5.12	5.00	1.15	.....	12.65	12.00	20.56	19.50
44547	Edelen's H. G. Tobacco Guano..	Baltimore	3.45	3.00	3.52	3.00	2.00	.....	8.15	8.00	31.08	27.50
44548	Edelen's Wheat & Grain Grower	Baltimore	1.06	1.00	1.04	1.00	1.10	.....	8.20	8.00	15.28	14.50
	Oyler & Spangler, Gettysburg, Pa.											
44648	16%	Emmitsburg	.....	.....	.....	.....	.85	.....	16.55	16.00	16.72	16.00
44649	Excelsior	Emmitsburg	2.12	2.00	4.04	4.00	1.10	.....	8.45	8.00	25.33	24.00
	Patuxent Guano Co., Baltimore, Md.											
44639	Acid Phosphate 16%, H. G.....	Baltimore	.....	.....	.....	.....	1.25	.....	16.80	16.00	17.05	16.00
44640	Fish Guano.....	Baltimore	1.25	1.00	1.84	2.00	1.00	.....	10.05	8.00	19.26	16.00

	Peerless Fertilizer Co., Chesterto	**wn, Md.**										
44670	Acid Phosphate, H. G.	Chestertown					.45		16.20	16.00	16.29	16.00
44587	Ford's Ideal	Chestertown	.51	.50	3.00	3.00	1.55		9.30	8.00	16.66	15.00
44588	Our Wheat Grower	Chestertown	.72	.50	5.36	5.00	.90		11.20	10.00	23.02	20.00
44671	10 & 5	Chestertown			6.76	5.00	.25		10.00	10.00	20.19	17.50
44672	10 & 2	Chestertown			2.60	2.00	.85		10.30	10.00	14.37	13.00
44673	12 & 5	Chestertown			5.00	5.00	.80		12.70	12.00	20.36	19.50
44674	12 & 3	Chestertown			4.28	3.00	.50		11.65	12.00	18.17	16.50
	Piedmont-Mt. Airy Guano Co., Ba	**ltimore, Md.**										
44658	Piedmt. Acid Phosphate 14%...	Baltimore					1.40		14.40	14.00	14.68	14.00
44458	Piedmt. Acid Phosphate 16%....	White Hall					2.20		14.30	16.00	14.74	16.00
44549	Piedmt. Ammoniated Fertilizer.	Baltimore	1.06	1.00	3.04	3.00	1.65		9.55	9.00	19.74	18.50
44464	Piedmt. Animal Tankage 10%..	Forest Hill	10.04	10.00			*12.45				57.67	50.00
44519	Piedmt. Farmers' Favorite	Baltimore	1.01	1.00	4.08	4.00	1.45		8.85	8.00	20.31	19.00
44461	Piedmt. Harvest Queen	White Hall	1.19	1.00	4.00	2.00	1.65		8.90	8.00	21.18	16.00
44629	Pd., H. G., Amm'd. Phos. & Pot.	Baltimore	2.95	3.00	3.04	3.00	1.60		9.45	8.00	29.08	27.50
44459	Piedmt. H. G. Vegetable Grower	White Hall	1.93	2.00	8.80	10.00	2.42		8.13	8.00	31.46	33.00
44520	Piedmt. Insula Fish Guano	Baltimore	.63	.50	2.00	2.00	.80		7.75	7.00	14.06	12.50
44456	Piedmt. Muriate of Potash	White Hall			46.40	50.00						
44455	Piedmt. Nitrate Soda	White Hall	18.50	18.25								
44690	Piedmt. Peerless Phosphate	Mt. Airy	1.11	1.00	1.20	1.00	.60	2.00	9.55	8.00	17.02	14.90
44466	Piedmt. Perfection Guano	Forest Hill	1.86	2.00	5.04	5.00	1.25		8.45	8.00	25.56	25.50
44460	Piedmt. Perfection Guano	White Hall	1.69	2.00	4.52	5.00	1.97		8.78	8.00	24.40	25.50
44635	Piedmt. Plow Brand	Baltimore	2.05	2.00	3.24	2.00	1.30		9.15	8.00	24.47	21.00
44659	Piedmt. Special Crop Grower...	Baltimore	1.28	1.00			1.15		10.25	10.00	16.88	15.00
44501	Piedmt. Special Potash Mixture	Baltimore			5.12	5.00	1.20		10.00	10.00	17.92	17.50
44630	Piedmt. Special Potash Mixture	Baltimore			5.04	5.00	1.05		10.45	12.00	18.22	19.50
44691	Piedmt. Stand Dis. Bone Phos..	Mt. Airy	1.16	1.00	1.28	1.00	.70	2.00	11.10	10.00	18.96	16.90
44644	Piedmont Standard	Baltimore	2.15	2.00	3.20	3.00	1.25		9.05	8.00	24.85	22.50
44504	Piedmt. Super Phos. & Potash..	Baltimore			5.00	5.00	1.15		12.10	12.00	19.83	19.50
44457	Piedmt. 10% Fish Tankage	White Hall	7.92	10.00			*14.10				48.06	50.00
44465	Piedmont 3-8-5	Forest Hill	3.04	3.00	5.00	5.00	2.20		8.30	8.00	31.44	30.50
44463	Piedmont 2-12-2	Forest Hill	2.12	2.00	2.08	2.00	1.65		12.00	12.00	26.05	25.00
	Ramsburg Fertilizer Co., Frederic	**k, Md.**										
44652	Alkaline Phosphate	Frederick			2.36	2.00	.25		14.70	12.00	18.29	15.00
44650	Ammoniated Bone Phosphate...	Walkersville	1.47	1.00	2.16	2.00	1.50		12.85	10.00	23.74	18.00
44653	Excelsior Half & Half	Frederick	1.28	1.00	1.24	1.00	1.05		12.00	10.00	20.47	16.50
44527	Excelsior Plant Food	Monrovia	2.08	2.00	2.00	2.00	2.62		10.98	10.00	24.90	23.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K.O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Ramsburg Fertilizer Co., Frederick,	**Md., Con't.**										
44528	Old Virginia Compound	Monrovia	1.37	1.00	4.08	4.00	2.25	.....	10.50	8.00	$23.92	$19.00
44529	Queen	Monrovia	.53	.50	1.08	1.00	1.90	.....	11.00	10.00	15.65	14.00
44530	Special Rock & Potash	Walkersville	.....	.....	4.00	5.00	.65	.....	12.05	12.00	18.18	19.50
44531	Super Phosphate	Monrovia	.....	.....	.....	.....	.30	.....	17.65	16.00	17.71	16.00
44532	Williams' Wheat & Grass Grower	Monrovia	1.14	1.00	1.28	1.00	1.40	.....	10.80	10.00	18.70	16.50
	Rasin-Monumental Co., Baltimore,	**Md.**										
44521	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	.70	.....	16.25	16.00	16.39	16.00
44539	Basic Lime Phosphate	Baltimore	.....	.....	.....	.....	2.90	.....	13.05	13.00	13.63	13.00
44692	Best Grain & Grass Formula	Mt. Airy	2.13	2.00	4.40	4.00	1.20	.....	9.80	10.00	27.29	26.00
44505	Capital Crop Compound	Baltimore	1.09	1.00	3.04	3.00	1.35	.....	9.20	9.00	19.48	18.50
44609	Empire Guano	Williamsport	2.06	2.00	2.00	2.00	1.70	.....	9.00	8.00	22.64	21.00
44506	H. G. Phosphate & Potash	Baltimore	.....	.....	5.00	5.00	.85	.....	12.25	12.00	19.92	19.50
44540	Muriate of Potash	Baltimore	.....	.....	49.80	48.00	.....	.....	.....	.....	.....	.....
44507	National Crop Compound	Baltimore	1.08	1.00	4.04	4.00	1.50	.....	8.10	8.00	19.86	19.00
44500	Nitrate of Soda	Baltimore	17.52	18.00	.....	.....	.....	.....	.....	.....	.....	.....
44541	Phosphate & Potash	Baltimore	.....	.....	4.48	5.00	1.70	.....	10.55	10.00	17.61	17.50
44550	Phospho Tobacco	Baltimore	.....	.....	.....	.....	1.00	.....	15.00	13.00	15.20	13.00
44542	Royal Fish, Bone & Potash	Baltimore	2.08	2.00	3.36	3.00	2.20	.....	8.20	8.00	24.08	22.50
44693	United Grain Grower	Mt. Airy	1.14	1.00	2.40	2.00	1.55	.....	8.25	8.00	17.86	16.00
44615	Vegetable Special	Baltimore	2.01	2.00	13.20	10.00	1.70	.....	8.35	8.00	38.54	33.00
44694	William Penn Crop Grower	Mt. Airy	1.30	1.00	1.32	1.00	.75	.....	7.75	8.00	16.38	14.50

	Reindollar Company, Taneytown, Md.											
44610	Acid Phosphate	Taneytown	.....	.....	.....	.....	.95	.....	16.45	16.00	16.64	16.00
44611	Ammoniated Phosphate	Taneytown	1.11	1.00	5.40	5.00	1.25	.....	14.05	12.00	27.95	24.50
44612	Rock & Potash	Taneytown	.....	.....	5.40	5.00	1.10	.....	14.75	12.00	23.07	19.50
	W. E. Robinson & Co., Bel Air, Md.	**Md.**										
44622	Vegetable & Grain Fertilizer	Vale	2.00	2.00	2.08	2.00	1.05	.....	8.75	8.00	22.08	21.00
	F. S. Royster Guano Co., Baltimore, Md.											
44636	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.60	.....	16.20	16.00	16.52	16.00
44551	Bully Guano	Baltimore	2.13	2.00	5.72	5.00	1.10	.....	8.60	8.00	28.05	25.50
44569	Cuckoo Guano	Rockville	1.06	1.00	1.20	1.00	.80	.....	8.15	8.00	15.41	14.50
44570	Dreadnought Guano	Rockville	2.17	2.00	2.40	2.00	.95	.....	7.50	8.00	22.14	21.00
44654	Economy Guano	Baltimore	1.28	1.00	2.40	2.00	.95	.....	9.05	8.00	19.24	16.00
44655	Fish, Flesh & Fowl	Baltimore	2.30	2.00	3.20	3.00	.45	.....	8.50	8.00	24.89	22.50
44651	German Kainit	Motters	.....	.....	13.60	12.00	.....	.....	.....	.....	.....	.....
44637	Phosphate & Potash 8-5	Baltimore	.....	.....	5.84	5.00	.75	.....	9.25	8.00	18.16	15.50
44616	Phosphate & Potash 12-5	Baltimore	.....	.....	4.68	5.00	1.15	.....	12.05	12.00	19.30	19.50
44571	Seeding Down	Rockville	1.06	1.00	2.84	3.00	1.05	.....	8.90	9.00	18.67	18.50
	Scott Fertilizer Co., Inc., Elkton, Md.											
44675	Potato Grower	Elkton	2.05	2.00	6.36	6.00	.60	.....	9.00	8.00	28.91	27.00
44589	Sol. Phosphate & Potash 12-5	Elkton	.....	.....	5.40	5.00	.65	.....	12.65	12.00	20.88	19.50
44676	Sol. Phosphate & Potash 12-2	Elkton	.....	.....	2.08	2.00	.60	.....	13.00	12.00	16.24	15.00
44590	Special Grain Grower	Elkton	.67	.50	4.32	4.00	.65	.....	8.90	8.00	18.86	16.50
44473	Special Mixture	Port Deposit (JSC)	3.00	3.00	3.20	3.00	1.65	.....	10.35	10.00	30.48	29.50
44591	Sure Growth Super Phosphate	Elkton	2.20	2.00	2.12	2.00	.65	.....	8.85	8.00	23.16	21.00
44592	Tip Top Sol. Phosphate 16%	Elkton	.....	.....	.....	.....	1.20	.....	17.05	16.00	17.29	16.00
44593	Wheat & Grass	Elkton	.63	.50	2.00	2.00	.65	.....	9.15	8.00	15.43	13.50
	Wm. H. Streett & Co., Fallston, Md.											
44661	Ammoniated Dissolved Bone	Baltimore	1.52	1.50	1.52	1.00	.75	.....	9.85	9.00	19.88	18.00
	Summers Fertilizer Co., Baltimore, Md.											
44572	All Crop Grower	Silver Spring	2.06	2.00	4.88	5.00	.65	.....	9.45	8.00	27.20	25.50
44573	Dissolved Phosphate 16%	Washington Grove	.....	.....	.....	.....	1.45	.....	16.30	16.00	16.59	16.00
44574	General Favorite	Rockville	2.22	2.00	2.36	2.00	.45	.....	8.40	8.00	23.13	21.00
44575	Ground Raw Bone	Silver Spring	3.70	4.50	.....	.....	*25.10	*20.50	.....	.....	33.56	34.80
44576	Jones' Favorite	Rockville	3.21	3.00	3.52	3.00	1.50	.....	12.85	12.00	34.48	31.50
44577	Phosphate & Potash Mixture	Rockville	.....	.....	5.12	5.00	.65	.....	12.05	12.00	19.86	19.50
44578	Wheat Special	Rockville	2.46	2.00	2.36	2.00	.40	.....	12.05	12.00	27.97	25.00
	Superior Guano Co., Baltimore, Md.											
44594	Acid Phosphate, 16% M. B. W.	Centreville	.....	.....	.....	.....	.30	.....	17.30	16.00	17.36	16.00
44552	Bartons Spec. Wheat Mixture	Baltimore	1.04	1.00	3.28	3.00	1.35	.....	12.75	12.00	23.14	21.50

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Superior Guano Co., Baltimore, Md.	**Con't.**										
44522	Caroline Special	Baltimore	1.13	1.00	3.00	3.00	.40	.....	9.15	9.00	$19.38	$18.50
44595	1-8-4 M. B. W.	Centreville	1.11	1.00	4.08	4.00	.50	.....	9.80	8.00	21.57	19.00
44656	Phosphate & Potash	Baltimore	.....	.....	5.76	5.00	.55	.....	12.95	12.00	21.70	19.50
44596	Wheat & Grass Special M. B. W.	Centreville	.....	.....	2.28	2.00	.60	.....	11.55	10.00	15.09	13.00
	Swift & Co., Baltimore, Md.											
44508	Acid Phosphate, 16% H. G.	Baltimore	.....	.....	.....	.....	.30	.....	15.50	16.00	15.56	16.00
44662	Bone Meal Fertilizer	Baltimore	3.52	3.00	.....	.....	*25.35	*24.00	.....	.....	32.81	29.40
44509	Champion Wheat & Corn Grower	Baltimore	2.15	2.00	2.08	2.00	.60	.....	12.10	12.00	26.09	25.00
44510	Fairway Fertilizer	Baltimore	6.35	7.00	1.08	1.00	.15	.....	8.20	8.00	41.60	44.50
44641	Farmer's Home	Baltimore	.....	.....	4.00	4.00	.35	.....	10.65	10.00	16.72	16.00
44623	Golden Grain Grower 2-8-5	Conowingo	2.22	2.00	5.36	5.00	.30	.....	8.10	8.00	27.30	25.50
44543	Kainit	Baltimore	.....	.....	12.08	12.40	.....	.....	.....	.....	.....	.....
44631	One-Nine-Three	Baltimore	1.33	1.00	3.16	3.00	.30	.....	9.95	9.00	21.40	18.50
44617	One-Ten-Five	Baltimore	1.14	1.00	5.40	5.00	.40	.....	10.15	10.00	24.03	22.50
44579	Phosphate & Potash	New Windsor	.....	.....	5.28	5.00	.25	.....	12.15	12.00	20.12	19.50
44511	Pulverized Sheep Manure	Baltimore	2.73	2.25	2.28	2.00	.10	.....	1.35	1.50	18.44	15.75
44526	Putting Green Fertilizer	Baltimore	7.32	8.00	2.76	1.00	.10	.....	2.40	2.00	43.16	43.50
44663	Raw Bone Meal Fertilizer	Baltimore	4.64	4.50	.....	.....	*21.45	*23.00	.....	.....	36.07	36.30
44523	Red Steer	Baltimore	2.01	2.00	2.04	2.00	.20	.....	8.20	8.00	21.35	21.00
44553	Reliable Grain Fertilizer	Baltimore	1.04	1.00	1.68	1.00	.20	.....	8.00	8.00	15.76	14.50
44544	Southern Planters Favorite	Baltimore	3.11	3.00	3.52	3.00	.10	.....	7.90	8.00	28.75	27.50
44642	Spec. Phosphate & Potash 10-2.	Baltimore	.....	.....	2.64	2.00	.35	.....	10.80	10.00	14.83	13.00
44618	Spec. H. G. Phos. & Potash 12-5	Baltimore										

44618	Spec. H. G. Phos. & Potash 12-5	Baltimore	.....	.....	5.36	5.00	.45	.....	12.25	12.00	20.38	19.50
44554	Special Wheat & Corn Grower.	Baltimore	2.03	2.00	4.24	4.00	.45	.....	11.05	10.00	27.65	26.00
44555	Special Wheat Grower	Baltimore	1.13	1.00	4.32	4.00	.25	.....	7.95	8.00	20.13	19.00
44643	Tankage	Baltimore	10.65	10.00	.....	.....	*6.65	.....	.....	.....	57.24	50.00
	H. S. Taveau & Co., Baltimore, Md.											
44512	Pride of Maryland	Baltimore	1.33	1.00	1.24	1.00	1.30	.....	10.30	10.00	19.07	16.50
	Thomas & Co., Frederick, Md.											
44580	Acid Phosphate 16%	Union Bridge	.....	.....	.....	.....	1.00	.....	16.10	16.00	16.30	16.00
44581	Plant Food	Union Bridge	1.28	1.00	3.04	3.00	.50	.....	9.75	9.00	20.81	18.50
	I. P. Thomas & Son Co., Philadelphia, Pa.											
44624	General Use Fertilizer 2-8-2	Colora	2.56	2.00	2.32	2.00	1.55	.....	8.55	8.00	25.14	21.00
44625	Victor Potash Fertilizer 2-8-5	Colora	2.27	2.00	5.40	5.00	1.35	.....	8.85	8.00	28.57	25.50
	Wm. B. Tilghman Co., Salisbury, Md.											
44597	Bone Tankage Mixture	Salisbury	2.39	2.00	3.40	3.00	.55	.....	9.65	9.00	26.81	23.50
44677	Fish, Bone & Potash Mixture	Salisbury	1.28	1.00	2.56	2.00	.70	.....	10.10	10.00	20.48	18.00
44697	Mixture "B"	Salisbury	4.01	4.00	4.40	4.00	.60	.....	10.05	8.00	36.82	34.00
44679	1-8-5 for Wheat & Grass	Salisbury	1.23	1.00	5.20	5.00	.35	.....	10.00	8.00	24.02	20.50
44680	Special Fish for Sweet Potatoes	Salisbury	2.01	2.00	4.56	5.00	.75	.....	9.10	7.00	26.14	24.50
44681	Special 1-9-3 Mixture	Salisbury	1.30	1.00	3.04	3.00	.45	.....	10.20	9.00	21.35	18.50
44599	Standard Fish Mixture	Salisbury	2.18	2.00	2.28	2.00	.55	.....	10.80	10.00	25.23	23.00
	United States Guano Co., Baltimore, Md.											
44533	Acid Phosphate, H. G.	Walkersville	.....	.....	.....	.....	.50	.....	15.85	16.00	15.95	16.00
44664	Grain Grower	Baltimore	2.85	2.00	2.32	2.00	2.85	.....	8.90	8.00	27.20	21.00
44534	H. G. Phosphate & Potash	Legore	.....	.....	5.60	5.00	1.05	.....	11.85	12.00	20.46	19.50
44535	1-8-2	Walkersville	1.25	1.00	2.32	2.00	1.65	.....	8.35	8.00	18.41	16.00
	E. S. Valliant & Son, Centreville, Md.											
44600	Big Three	Centreville	1.11	1.00	3.36	3.00	.70	.....	10.40	9.00	21.13	18.50
44682	Chester Brand	Centreville	1.11	1.00	4.40	4.00	1.30	.....	12.60	11.00	25.01	22.00
44601	Grain Grower	Centreville	.68	.50	2.20	2.00	.95	.....	8.60	8.00	15.49	13.50
44695	McKenney's Mixture	Centreville	2.01	2.00	5.44	5.00	.60	.....	11.40	9.00	29.73	26.50
44603	Oriole	Centreville	.63	.50	4.96	4.00	.60	.....	9.80	9.00	20.51	17.50
44604	Standard	Centreville	1.16	1.00	4.88	4.00	.75	.....	9.85	9.00	23.12	20.00
44683	10-2	Centreville	.....	.....	2.04	2.00	.70	.....	11.90	10.00	15.10	13.00
44476	12-5	Centreville (CLW)	.....	.....	4.88	5.00	.70	.....	12.20	12.00	19.66	19.50
44605	12-5	Centreville	.....	.....	5.32	5.00	.65	.....	12.45	12.00	20.56	19.50
44684	Wheat & Grass	Centreville	.41	.25	5.64	5.00	.55	.....	11.20	11.00	21.82	19.75
44685	Winner	Centreville	2.00	2.00	4.36	4.00	.55	.....	11.60	11.00	28.25	27.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Wm. H. Valliant & Bro., Bellevue, Md.											
44686	Fish Manure	Bellevue	1.59	2.00	1.08	2.00	.40	.....	1.90	2.00	$11.55	$15.00
44687	Fish Mixture	Bellevue	1.47	2.00	4.08	2.00	.70	.....	11.85	8.00	25.46	21.00
	Virginia-Carolina Chemical Co., Baltimore, Md.											
44545	Acid Phosphate 14%	Baltimore	.....	.....	.....	.....	1.15	.....	15.60	14.00	15.83	14.00
44517	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.05	.....	16.20	16.00	16.41	16.00
44524	Fish, Bone & Potash	Baltimore	1.93	2.00	2.76	3.00	2.30	.....	8.05	8.00	22.30	22.50
44619	Giant Grain & Clover	Baltimore	2.10	2.00	2.44	2.00	1.30	.....	12.20	12.00	26.62	25.00
44665	H. G. Potash Mixture	Baltimore	.....	.....	5.28	5.00	1.15	.....	12.60	12.00	20.75	19.50
44632	National Ammoniated Guano	Baltimore	1.26	1.00	4.08	4.00	.85	.....	8.05	8.00	20.64	19.00
44556	1-9-3	Baltimore	1.06	1.00	3.08	3.00	.25	.....	10.95	9.00	20.92	18.50
44620	Phospho Tobacco	Beltsville	.....	.....	.....	.....	1.30	.....	14.65	13.00	14.91	13.00
44638	Raw Bone Meal	Baltimore	4.54	4.50	.....	.....	*24.00	*23.00	.....	.....	37.10	36.30
44525	Special Phosphate & Potash	Baltimore	.....	.....	5.00	5.00	2.00	.....	10.00	10.00	17.90	17.50
44513	Standard Grain Grower	Baltimore	1.02	1.00	2.12	2.00	2.05	.....	7.00	8.00	15.69	16.00
44633	Standard Crop Grower	Baltimore	2.15	2.00	2.32	2.00	2.15	.....	8.05	8.00	22.71	21.00
	Westminster Fertilizer Co., Westminster, Md.											
44582	Governor	Westminster	1.42	1.50	3.40	3.00	.45	.....	10.10	10.00	22.39	22.00
44583	Leader	Westminster	1.13	1.00	3.48	3.00	.45	.....	9.55	9.00	20.51	18.50
44584	Super-A	Westminster	1.13	1.00	2.32	2.00	.60	.....	10.75	10.00	20.00	18.00
	Harry W. Whistler, Bel Air, Md.											
44626	Crop Grower	Fallston	1.16	1.00	3.40	3.00	.85	.....	8.35	8.00	19.42	17.50
44627	Fish, Bone & Potash	Bel Air	1.09	1.00	1.08	1.00	.80	.....	8.00	8.00	15.23	14.50
	Worcester Fertilizer Co., Snow Hill, Md.											

44626	Crop Grower	Fallston	1.16	1.00	3.40	3.00	.85		8.35	8.00	19.42	17.50
44627	Fish, Bone & Potash	Bel Air	1.09	1.00	1.08	1.00	.80		8.00	8.00	15.23	14.50
	Worcester Fertilizer Co., Snow Hi	**ll, Md.**										
44688	Acid Phosphate, 16%	Snow Hill					.30		16.45	16.00	16.51	16.00
44689	Bumper Crop Grower	Snow Hill	1.37	1.00	3.60	3.00	.35		9.20	9.00	21.52	18.50
44606	Fish, Bone & Potash	Snow Hill	2.47	2.00	3.00	2.00	.60		8.70	8.00	25.67	21.00
44696	Fish, Bone & Potash	Snow Hill	2.58	2.00	3.00	2.00	.60		9.40	8.00	26.92	21.00
44607	12-5	Snow Hill			5.20	5.00	.75		11.45	12.00	19.40	19.50

*Total Phosphoric Acid.

KEY TO SYMBOLS USED IN TABLE II, PAGE 24

AMMONIA (Nitrogen)

A—Ammonium Sulfate
B—Bone
b—Base Goods
C—Cyanamid
c—Crab Scrap
D—Blood
F—Fish
H—Humus or Peat Treated
K—Tobacco Stems
M—C. S. Meal
m—Sheep Manure
N—Nitrate Soda
Na—Nitrate of Ammonia
T—Animal Tankage
t—Garbage Tankage
L—Linseed Meal

PHOSPHORIC ACID AVAILABLE

A—Animal Matter
B—Bone
b—Base Goods
F—Fish
R—Dissolved Rock
c—Crab Scrap
m—Sheep Manure
T—Tankage
Rd—Double Super Phos.
*Total Phosphoric Acid in Bone
**Total Phosphoric Acid in Untreated Rock

POTASH, SOLUBLE

a—Ashes
C—Cement By-Product
K—Kainit
M—Muriate
m—Sheep Manure
N—Nebraska Potash (Sulfate and Carbonate)
S—Sulfate
T—Tobacco Stems
k—Kelp
t—Trona (California)
c—Carbonate
B—Sugar Beet Res. Char.
D—Double Manure Salt
s—Cottonseed Meal
n—Nitrate of Potash
b—Base Goods

TABLE II.—Registration of Fertilizers for 1923, complete to January 25. For Key, see Page 23.

FIRMS AND BRANDS	PER CENT. AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
American Fertilizing Co., Baltimore, Md.			
Best Potato Formula, 4—8—6	1/3—1/2A, 1/4—1/3T, 1/4—1/3F	R	1/5—1/4T, 1/3—1/2M, 1/3—1/2D
Eastern Shore Potato Special, 7—6—5	" " "	"	" " "
Early Truckers Special, 5—6—5	1/2—3/4A, 1/2—1/4T	"	" " "
Excelsior Guano, 2—8—5	" "	"	" " "
Champion Grain Grower, 1—8—4	" "	"	" " "
Fish and Bone Compound, 2—8—3	1/3—1/2A, 1/4—1/3T, 1/4—1/3F 1/8—1/4B	"	" " "
Grain and Grass Grower, 1—9—3	1/2—3/4A, 1/2—1/4T	"	" " "
Premium Grain and Clover Mixture, 2—12—2	" "	"	" " "
Eagle Crop Grower, 2—8—2	" "	"	" " "
Ammoniated Crop Compound, 1—8—2	1/3—1/2A, 1/4—1/3T, 1/4—1/3F	"	" " "
Special Fish Guano, 1—10—0	" " "	"	
Prize Guano, 2—8—10	" " "	"	" " "
Formula for Wheat and Corn, 0—10—5		"	" " "
Dissolved Phos. and Potash, 0—10—2		"	" " "
H. G. Acid Phosphate, 16%			
Double Crop Producer, 2—16—2	1/2—3/4A, 1/2—1/4T	"	" " "
Phospho Tobacco, 0—13—0			
Double Extra Phos. and Potash, 12—5		"	" " "
Reliable Guano, 1—8—1	" "	"	" " "
Strawberry and Pea Special, 7—6—1	" "	"	" " "
Armour Fertilizer Works, Baltimore, Md.			
Lime Phosphate, 13%			
Crow Grower, 1—8—2	1/5—4/5T, 1/5—4/5N	1/5—4/5R, 1/5—4/5T	1/5—4/5K, 1/5—4/5D
Farmer's Choice, 1—9—3	" "	" "	" "
Royal Ammoniated, 1—8—4	" "	" "	" "
Grain Grower, 2—8—2	1/5—2/5T, 1/5—2/5A, 1/5—2/5N 1/5—2/5F	1/5—2/5R, 1/5—2/5T 1/5—2/5F	" "
Sheep Manure, 1½—1—2½			
Big Crop, 2—8—10	" " "	" "	" "
Big Crop, 2—16—2	1/5—2/5T, 2/5—3/5A	1/5—2/5R, 1/5—2/5Rd 1/5—2/5T	" "
Big Crop Raw Bone Meal, 4½—21½			
Big Crop Muriate of Potash, 48%			
Big Crop Nitrate of Soda, 18%			
Kainit, 12%			
Big Crop, 2—8—5	1/5—2/5A, 1/5—2/5T 1/5—2/5N, 1/5—2/5F	1/5—2/5R, 1/5—2/5T 1/5—2/5F	" "
Big Crop Bone Mixture, 2—9—3	1/5—2/5A, 1/5—2/5N 1/5—2/5B, 1/10—2/10F	1/5—2/5R, 1/5—2/5B 1/5—2/5T, 1/5—2/5F	" "
Big Crop, 3—8—3	1/5—2/5A, 1/5—2/5N 1/5—2/5D	R	" "
Big Crop, 4—8—4	1/5—2/5T, 1/5—2/5A 1/5—2/5N, 1/5—2/5F	1/5—2/5R, 1/5—2/5T 1/5—2/5F	M
Big Crop Acid Phosphate, -|-16			
Big Crop, 0—10—5		R	1/5—4/5K, 1/5—4/5D
Big Crop, 0—12—5		"	" "
Big Crop, 2—12—2	1/5—2/5A, 1/5—2/5T 1/5—2/5N, 1/5—2/5F	1/5—2/5R, 1/5—2/5T, 1/5—2/5F	" "
Big Crop, 2—10—4	" "	" " "	" "
Big Crop, 5—8—5	" "	" " "	M
Big Crop, 5—8—7	" "	" " "	"
Big Crop, 7—6—5	" "	" " "	"

Big Crop, 0—12—5		R	1/5—4/5K, 1/5—4/5D
Big Crop, 2—12—2	1/5—2/5A, 1/5—2/5T 1/5—2/5N, 1/5—2/5F	1/5—2/5R, 1/5—2/5T, 1/5—2/5F	1/5—4/5K, 1/5—4/5D
Big Crop, 2—10—4			
Big Crop, 5—8—5			M
Big Crop, 5—8—7			
Big Crop, 7—6—5			
Phosphate and Potash No. 1, —10—2		R	1/5—4/5K, 1/5—4/5D
Barrett Co., New York, N. Y.			
Arcadian Sulphate of Ammonia, 25¼			
Baugh & Sons Co., Baltimore, Md.			
Raw Bone Meal, 4½—21½			
3 and 50 Bone Meal, 3—23			
Pure Bone and Muriate of Potash Mixture, 2½—20; total —5	B	B	M
Half and Half Mixture, 1½—10—5		1/2R, 1/2B	
New Process 10% Guano, 10—5—	1/7—3/7A, 1/7—3/7B, 1/7—5/7T	1/7—5/7R, 1/7—3/7B, 1/7—3/7T	
10% Plant Bed Guano, 10—3—			1/7—6/7M, 1/7—6/7K
7% Potato Guano, 7—6—5			
Farmer's Friend Guano, 5—6—7			
Peruvian Guano Substitute, 5—6—5			
Potato and Truck Special, 4—8—6			
Grand Rapid Guano, 3—8—3			
Commercial Superphosphate, 2—8—10			
Complete Animal Base Fertilizer, 2—8—5			
Special Potato Manure, 2—8—5			
Double Eagle Phosphate, 2—10—4			
Balanced Plant Food, 2—12—2			
Corn and Oats Fertilizer, 2—12—2			
Tomato Compound, 2—8½—2			
Animal Base and Potash Compound, 2—8—2			
Special Tobacco Manure, 4—8—4			S
Yucatan Tobacco Grower, 3—8—3			
Fish, Bone and Potash, 4—8—4	1/7—3/7A, 1/7—5/7T 1/7—3/7B, 1/7—3/7F	1/7—5/7R, 1/7—3/7T 1/7—3/7B, 1/7—3/7F	1/7—6/7M, 1/7—6/7K
Fish Mixture, 2—8½—2			
Fish Bone Guano, 2—10—1			
Excelsior Guano, 1—8—4	1/7—3/7B, 1/7—3/7T, 1/7—5/7t	1/7—5/7R, 1/7—3/7B, 1/7—3/7T	
Durable Plant Food, 1—8—3	1/7—3/7B, 1/7—3/7, 1/7—5/7t	1/7—5/7R, 1/7—3/7B, 1/7—3/7T	1/7—5/7M, 1/7—6/7K
Economical Crop Producer, 1—8—2			
Geenral Crop Grower, 1—8—1			
Phosphate and Potash Mixture, 12—5		R	
Phosphate and Potash Mixture, 10—4			
Soluble Alkaline Superphosphate, 10—2			
Acid Phosphate, —16—			
Acid Phosphate, —14—			
Ground Fish, 10—5; total			
Nitrate of Soda, 18½—			
Muriate of Potash, —48			
Genuine Imported Kainit, —12.40			
Ground Tanakage, 7—5 total			
Bryant Fertilizer Co., Alexandria, Va.			
Queen Ammoniated Bone, 1—8—1	1/2—3/4A, 1/2—1/4T	R	1/5—1/4T, 1/3—1/2M, 1/3—1/2D
Special Wheat Mixture, 1—8—2			
Slaughter House Bone, 1¼—10—0			
Formula "E," 2—8—2			
H. G. Potash Mixture, 0—10—4			
Bone and Potash Mixture, 0—10—2			
16% Acid Phosphate, —16—			

FIRMS AND BRANDS	PER CENT. AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Bryant Fertilizer Co., Alexandria, Va. (Cont.)			
Double Crop Producer, 2—16—2	1/2—3/4A, 1/2—1/4T	R	1/5—1/4T, 1/3—1/2M, 1/3—1/2D
Bone Ammoniated, 2—10—0	1/3—1/2A, 1/4—1/3T	"	" " "
	1/4—1/3F, 1/8—1/4B		
Victor Tobacco Fertilizer, 3—8—3	1/2—3/4A, 1/2—1/4T	"	1/3—1/2S, 1/3—1/2M
Tobacco Bed Fertilizer, 10—4—0	" "	"	1/3—1/2D, 1/5—1/4T
Griffith & Boyd Co., Baltimore, Md.			
Stable Manure Substitute, 3½—5¼—4	1/6N, 1/3T, 1/6A, 1/3b	9/10R, 1/10T	1/2M, 1/2D
Fish, Blood and Potash, 1.75—7—2	1/3N, 1/3T, 1/3F	" "	1/3M, 2/3K
Royal Potash Guano, 1—8—4	1/2N, 1/2T	5/6R, 1/6T	1/2M, 1/2D
Peerless Fertilizer, ½—8—2	T	9/10R, 1/10T	K
Farmer's Queen, 1—9—3	1/2N, 1/2T	4/5R, 1/5T	1/3M, 2/3K
Dissolved Animal Bone, 2½—10—			
H. G. 16% Acid Phosphate, —16—		R	K
Special Grain Grower, —10—2			
Pure Fine Ground Bone Meal, 4—20			
Farmer's Potato Manure, 1—8—6	1/2N, 1/4B, 1/4T	4/5R—1/5T	1/2M, 1/2D
Special Guano, 2—8—5	" " "	" "	" "
Special Formula, 2—10—4	" " "	" "	" "
Fish and Potash Guano, 1.75—7—3	1/3N, 1/3T, 1/3F	9/10R, 1/10T	1/3M, 1/3K, 1/3D
XX Potash Manure, 0—10—5		R	" " "
Accomac Trucker, 5—6—5	2/5N, 1/5A, 1/5T, 1/5F	9/10R, 1/10T	1/2M, 1/2D
General Crop Grower, 2—8—2	1/4N, 1/4T, 1/4A, 1/4b	" "	1/3M, 2/3K
Spring Crop Grower, 2—6½—4½	" " "	" "	" "
Griffith & Turner Co., Baltimore, Md.			
Amm'd Alkaline Plant Food, 1—6—1½	1/3N, 1/3T, 1/3b	9/10R, 1/10T	K
Amm'd Butchers' Bone Phos., 1¼—9—1½	" " "	" "	"
Special Potato Guano, 1—8—4	" " "	" "	1/2M, 1/2D
Hubbard Fertilizer Co., Baltimore, Md.			
Fertilizer, 7—8—0	1/5N, 2/5A, 1/5T, 1/5F	R	M
Tobacco Bed Fertilizer, 10—2—0	" " " "	"	"
7% Royal Seal, 7—6—5	" " " "	"	"
5% Royal Seal, 5—6—5	" " " "	"	"
Yellow Wrapper, 3—8—3	" " " "	"	"
Complete Fertilizer, 2—12—2	" " " "	"	"
Jersey Trucker, 2—8—10	" " " "	"	"
Money Maker Fertilizer, 2—8—5	" " " "	"	"
Farmers I X L, 2—8—2	" " " "	"	"
1—9—3 Fertilizer, 1—9—3	" " " "	"	"
Fish Mixture, 1—8—1	" " " "	"	"
Climas Phosphate, 1—7—4	" " " "	"	"
Fish and Potash Mixture, ½—8—2	" " " "	"	"
Alkaline, —12—5		"	"
H. G. Potash Mixture, —10—4		"	"
Phosphate and Potash, —10—2		"	"
Acid Phosphate, —16—		"	"
Lime Phosphate, —13—			
Jarecki Chemical Co., Baltimore, Md.			
Acid Phosphate, —16—		R	1/5—4/5K, 1/5—4/5D
Phosphate and Potash, —10—2		"	" "
Fertilizer, —12—4		"	" "
No. 1 Formula, 1—8—2	1/5—4/5N, 1/5—4/5T	1/5—4/5R, 1/5—4/5T	" "
Fertilizer, 1—8—4	" "	" "	" "
Lake Erie Fertilizer, 1—12—1	" "	" "	" "
Grain Grower, 2—8—2	1/5—2/5A, 1/5—2/5N	1/5—2/5R, 1/5—2/5T, 1/5—2/5F	
	1/5—2/5T, 1/5—2/5F	" " "	" "
Fish and Potash Mixture, 2—8—3	" "	1/5—2/5R, 1/5—2/5T 1/5—2/5F	1/5—4/5K, 1/5—4/5D
	1/5—2/5A, 1/5—2/5T		

Jarecki Chemical Co., Baltimore, Md.			
Acid Phosphate, —16—		R	1/5—4/5K, 1/5—4/5D
Phosphate and Potash, —10—2		"	" "
Fertilizer, —12—4			" "
No. 1 Formula, 1—8—2	1/5—4/5N, 1/5—4/5T	1/5—4/5R, 1/5—4/5T	" "
Fertilizer, 1—8—4	" "	" "	" "
Lake Erie Fertilizer, 1—12—1	1/5—2/5A, 1/5—2/5N	1/5—2/5R, 1/5—2/5T, 1/5—2/5F	" "
Grain Grower, 2—8—2	1/5—2/5T, 1/5—2/5F	" " "	" "
	" "		
Fish and Potash Mixture, 2—8—3	1/5—2/5A, 1/5—2/5T	1/5—2/5R, 1/5—2/5T 1/5—2/5F	1/5—4/5K, 1/5—4/5D
Crop Special, 2—8—5	1/5—2/5N, 1/5—2/5F	" " "	"
	" "	" " "	M
Fertilizer, 2—12—2	" "		
High-Grade Potato, 2—8—10	1/5—2/5T, 2/5—3/5A	1/5—2/5R, 1/5—2/5Rd, 1/5—2/5T	1/5—4/5K, 1/5—4/5D
Fertilizer, 2—16—2	1/5—2/5A, 1/5—2/5N	1/5—2/5R, 1/5—2/5T, 1/5—2/5F	M
Potato and Trucker, 4—8—4	1/5—2/5T, 1/5—2/5F	" " "	"
	" "	" " "	"
Truckers' Favorite, 5—8—5	" "		
7% Trucker, 7—6—5			
Raw Bone Meal, 4½—21½			
Nitrate of Soda, 18—			
Maryland Milling & Supply Co., Sykesville, Md.			
H. G. Acid Phosphate, —16—		R	K
Newman's Grain Producer, 1—8—1	T	"	D
Warfield's Special, 1—8—4	"	"	K
Gambrill's Excelsior Super Phos., 2—8—2		"	"
Phosphate and Potash, —10—2		"	D
Phosphate and Potash, —10—5		RB	"
Fish Bone and Potash, 1—9—2	F	R	MK
Truckers' Favorite, 2—8—5	T		
Medford Fertilizer Works, Medford, Md.			
No. 2, 1—8—1	t	R	K
Mutual Rendering Co., Inc., Philadelphia, Pa.			
Ground Steamed Bone, 2.46—22.90			
Florists' Tankage, 4.93—14—			
Natural Guano Co., Aurora, Ill.			
Pulverized Sheep Manure, 2.73—1—2			
Rasin-Monumental Co., Baltimore, Md.			
Best Crop Formula, 2—10—6	1/2—3/4A, 1/2—1/4T	R	1/3—1/2M, 1/5—1/4T, 1/3—1/2D
Best Grain and Grass Formula, 2—10—4	" "	"	" " "
National Crop Compound, 1—8—4	" "	"	" " "
Capital Crop Compound, 1—9—3	" "	"	" " "
Empire Guano, 2—8—2	" "	"	" " "
United Grain Grower, 1—8—2	" "	"	" " "
Wheat, Corn and Oats Mixture, ½—8—2	" "	"	" " "
William Penn Crop Grower, 1—8—1	" "	"	" " "
Royal Manure, ½—8—1	" "	"	" " "
H. G. Phosphate and Potash, —12—5		"	" " "
Special Phosphate and Potash, —10—5		"	" " "
Phosphate and Potash Fertilizer, 10—2			
Acid Phosphate, —16—			
Basic Lime Phosphate, —13—			
Phospho Tobacco, —13—		R	1/3—1/2M, 1/5—1/4T, 1/3—1/2D
Universal Crop Manure, 2—8—5	1/2—3/4A, 1/2—1/4T	"	" " "
Double Crop Producer, 2—16—2	" "	"	" " "
Best Potato Formula, 4—8—6	1/3—1/2A, 1/4—1/3T, 1/4—1/3F	"	
Vegetable Special, 2—8—10	" " "	"	
Special Fish Mixture, 1—10—0	" " "	"	" " "
Early Truckers' Special, 5—6—5	" " "	"	" " "
Eastern Shore Potato Special, 7—6—5	" " "	"	" " "
Royal Fish, Bone and Potash, 2—8—3	1/3—1/2A, 1/4—1/3T		
	1/8—1/4B, 1/4—1/3F		

FIRMS AND BRANDS	PER CENT. AND SOURCES OF Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
F. S. Royster Guano Co., Baltimore, Md.			
Lime Phosphate, —13			
Acid Phosphate, —16			
Acid Phosphate, —18			
Phosphate, —10—4		R	M
Phosphate and Potash, —12—5		"	"
Cuckoo Guano, 1—8—1	1/2—2/3A, 1/6—1/4T, 1/6—1/4F	95R, 2½T, 2½F	"
Economy Guano, 1—8—2	" " "	" " "	"
Wonder Guano, 1—8—3	" " "	" " "	"
Rational Guano, 1—8—4	" " "	" " "	"
Dreadnaught Guano, 2—8—2	" " "	" " "	"
Fish, Flesh and Fowl, 2—8—3	" " "	" " "	"
Bully Guano, 2—8—5	" " "	" " "	"
Scout Guano, 2—8—7	" " "	" " "	"
Banner Guano, 2—8—10	" " "	" " "	"
Vim Guano, 2—12—2	" " "	" " "	"
Triumph Guano, 3—8—3	" " "	" " "	"
Sensational Guano, 3—8—5	" " "	" " "	"
Trucker's Delight, 4—8—4	" " "	" " "	"
Ripper Potato Guano, 5—7—5	" " "	" " "	"
Arrow 7% Potato Guano, 7—6—5	" " "	" " "	"
Virginia-Carolina Chemical Co., Baltimore, Md.			
Best Potato Formula, 4—8—6	1/3—1/2A, 1/4—1/3T, 1/4—1/3F	R	1/3—1/2M, 1/5—1/4T, 1/3—1/2D
Eastern Shore Potato Special, 7—6—5	" " "	"	" " "
Early Trucker's Special, 5—6—5	" " "	"	" " "
Fish, Bone and Potash, 2—8—3	1/3—1/2A, 1/4—1/3T, 1/4—1/3F, 1/8—1/4B	"	" " "
Tobacco Bed Fertilizer, 10—4—0	1/2—3/4A, 1/2—1/4T	"	
Tobacco Grower, 4—8—4	" "	"	1/3—1/2M, 1/3—1/2S, 1/5—1/4T, 1/3—1/2D
National Ammoniated Guano, 1—8—4	" "	"	1/3—1/2M, 1/5—1/4T, 1/3—1/2D
One, Nine, Three	" "	"	" " "
Standard Crop Grower, 2—8—2	" "	"	" " "
Standard Grain Grower, 1—8—2	" "	"	" " "
Special Compound, 1—8—1	" "	"	" " "
Giant Grain and Clover Mixture, 2—12—2	" "	"	" " "
Giant, 3—8—3	" "	"	" " "
H. G. Phosphate and Potash, —12—5		"	" " "
Special Phosphate and Potash, —10—5		"	" " "
Standard Phosphate and Potash, —10—2			
Acid Phosphate, 16%			
Basic Lime Phosphate, —13			
F. M. Wilson, Pocomoke City, Md.			
Favorite Truck, 5—8—5	1/2N, 3½F	R	M
Peninsula Phosphate, 2—12—1¼	F	"	"
York Chemical Works, York, Pa.			
Standard, 2—8—5	2/3N, 1/3T	4/5R, 1/5T	D
Grain Special 2—12—2	" "	" "	"
Standard Potash, 1—8—4	" "	" "	"
One-Eight-Two	" "	" "	"
Twelve and Four		" "	"
Ten and Two		" "	"
Acid Phosphate, —16		" "	"

Fertilizer Law of Maryland.

IN EFFECT JUNE 1, 1922.

Section 1. The term "fertilizer" as used in this Act shall mean any commercial fertilizer, or any article, substance or mixture sold, offered or exposed for sale, for manurial purposes in the State of Maryland of which the selling price shall be more than $5.00 per ton of two thousand pounds, but shall not include ground gypsum, lime, ground limestone, ground shells, dung of all poultry or dung of domestic animals, in bulk, when sold as such and when not mixed with other fertilizer or fertilizer materials. The term "State Chemist" shall mean the professor in charge of the Chemical Department of the University of Maryland, who shall be ex-officio State Chemist. The term "brand" shall mean the full name, brand and trade-mark under which a fertilizer is sold, together with a statement of the percentage of the valuable ingredients contained in said fertilizer.

Sec. 2. That every manufacturer, jobber, or manipulator of commercial fertilizer, and materials used in the manufacture of the same, who may desire to sell or offer for sale in the State of Maryland such fertilizer or fertilizer materials before offering the same for sale shall file or register with the University of Maryland upon forms furnished by said University the name of each and every brand of fertilizer which it is desired to sell in the said State by any said manufacturer, jobber, or manipulator, or their agents, together with the name and address of said manufacturer, jobber, or manipulator, and the guaranteed analysis of said fertilizer stating the sources from which the nitrogen, phosphoric acid and potash are derived; the statement as to the sources of the plant foods shall be made in terms of the percentages making up the total per cent of each.

Before any person or firm shall sell or offer for sale any pure or mixed Culture of Micro-Organism or other material to be used for promoting directly or indirectly the growth of higher plants, he or they shall secure a permit and shall file or register with the University of Maryland a statement under oath, specifying the composition of the substance, and the kind of Micro-Organisms contained therein which promotes the growth of higher plants, and they shall pay to the University of Maryland a permit and registration fee of $10.00 per brand. The University of Maryland shall have power to refuse or cancel such permit whenever any culture or Micro-Organisms or any other material used for promoting the growth of plants is sold under false or misleading claims.

Sec. 3. That every importer, manufacturer, manipulator, dealer or agent before selling, offering or exposing for sale, within the State of Maryland any fertilizer shall pay to the University of Maryland a fee of $10.00 per brand for each brand registered under Section 2 of this Act and on or before December 31st, of each year shall file with the University a statement, made under oath in due form of law, giving the total number of tons of fertilizer sold during that calendar year in the State of Maryland, and shall pay thereon an inspection tax of ten cents per ton; provided, however, goods sold in bulk to manufacturers, manipulators, or mixers for resale, of fertilizers shall not be subject to the said tax of ten cents per ton; provided further that where the tonnage tax paid in any one calendar year is in excess of the brand tax of $10.00 above provided the said brand tax shall be rebated; and provided further that when any manufacturer, dealer or importer has paid the required inspection fees no other person selling the same goods under his name and brand shall be required to pay such fee.

Sec. 4. That every bag, barrel, or package of fertilizer must bear plainly and conspicuously on the outside of same, and every parcel or lot sold in bulk must be accompanied by a clear and true statement in legible print, in the order herein stated, the following:

The net weight of the contents of the package or lot in pounds;

Brand name or trade-mark;

Grade (as 2-10-2) namely, 2% of Ammonia, 10% Phosphoric Acid, and 2% Potash.

Guaranteed analysis in percentages:

Total nitrogen and/or its equivalent to Ammonia (NH_3);
Water Soluble Nitrogen and/or its equivalent to Ammonia (NH_3);
Available Phosphoric Acid;
Water Soluble Potash (K_2O);
Name and address of manufacturer.

In lieu of the available phosphoric acid above stated, the soluble phosphoric acid, and the reverted phosphoric acid, and the minimum of insoluble phosphoric acid may be given, and the maximum per cent of chlorine shall be given. In the case of unacidulated bone, tankage, fish or other animal, or vegetable matter, used as fertilizer, it shall be lawful to guarantee the phosphoric acid as total phosphoric acid; provided, however, that in the statement of the guaranteed analysis the minimum percentage only of the valuable constituents shall be given. It shall be unlawful to brand as pure bone any mixture in which any part of the phosphoric acid is from sources other than bone.

Sec. 5. That it shall be unlawful to sell, offer or expose for sale for fertilizer purposes any raw, or untreated, leather, hair, wool waste, hoof, horn, peat, cyanogen compounds, muck, tartar pomace, mora meal, or similar materials, either as such or mixed with other fertilizer materials; provided, however, that this section shall not apply to such material as has been treated in a manner to make available the essential fertilizer constituents which it may contain; and provided further that the section shall not apply to the raw materials hereinbefore enumerated which are consigned to, or offered for sale in bulk, to manipulators, or manufacturers of fertilizers.

Sec. 6. That the words "High Grade" shall not appear upon any bag or package of any complete fertilizer containing, according to its guaranteed analysis, less than 1.65% of nitrogen (equivalent to 2% of ammonia), 10% of available phosphoric acid and 2% of potash.

Sec. 7. That each and every brand of fertilizer, or fertilizer material, filed with the University of Maryland must remain uniform with the guaranteed analysis of said brand, and in no case, even at a subsequent registration, shall the grade be lowered by reducing any, or all, of the several constituents contained therein.

Sec. 8. That it shall be the duty of the University of Maryland to procure for analysis one or more samples in each year, as far as practicable, of all fertilizers sold, offered for sale or used in the State of Maryland, and the State Chemist, or any agent or representative, duly authorized by him, or by the University of Maryland, shall have the right to take samples from any lot, or parcel, or fertilizer in the possession, or in the keeping of any manufacturer, manipulator, dealer, agent, consumer or transportation company in said State of Maryland, and it shall be the duty of the University of Maryland to publish at least semi-annually the results of the analysis made by the said University of the samples procured by or sent to it for such purpose, and when reporting, or publishing the result of any analysis to state the approximate commercial value in dollars and cents of the fertilizer so analyzed per ton of two thousand pounds, such value to be based upon the analysis made at the said University and upon a standard of valuation to be ascertained, fixed and published by said University as above provided after conference with the proper officials of adjacent States.

Sec. 9. Any purchaser of fertilizer, or fertilizers, provided he is not a manufacturer, or manipulator, or agent, of the same, may have taken, in the presence of a disinterested witness, a sample, or samples, of said fertilizer, and forward the same with all transportation charges prepaid to the University of Maryland for analysis, provided that samples so taken shall be from unbroken bags, or packages, which have not been damaged or injured in transit, or by exposure, and which have not been in possession of the owner more than thirty (30) days, provided, further, that said samples be taken from at least 5% of the bags or packages comprising the brand purchased, and if there are less than 100 bags, or pack-

ages, of the brand so purchased samples shall be taken from not less than five bags, or packages, and if there are less than five bags or packages samples shall be taken from each. All such samples shall be taken under such additional rules and regulations as may be prescribed by the University of Maryland, provided further, that every sample sent for analysis to the said University shall be fully described on forms to be furnished by said University free of charge, said description giving a full and complete statement of the time and place of sampling, of all marks on the bags or packages thereof, and of all the facts relating to the same, said description and statement shall be signed by the purchaser of the fertilizer, the person drawing the sample and the disinterested witness or witnesses as above provided, and provided further, that the purchaser, or purchasers, sending such sample, or samples, of fertilizer to said University for analysis shall withhold said description or descriptions of said sample or samples until he has received from the said University of Maryland the report of the analysis of said fertilizer. Any person or persons receiving an analysis from the said University as required under this Act shall immediately thereafter forward to it the statement required by this Act to be made at the time of taking the sample or samples.

Sec. 10. That it shall be the duty of the University of Maryland to analyze upon request, without cost or charge, all samples of fertilizer sent to said University and taken in the manner prescribed in this Act. The said University, the State Chemist, or his assistants or agents, shall not demand of any purchaser so sending sample, or samples, for analysis any advice, information or statement as to any analysis appearing on the original unbroken packages, or bags, from which said sample or samples were taken, or the name or names of any individual, representative, agent or corporation or firm from which said fertilizer, or fertilizers, were purchased; and it shall be the duty of the said University through its duly authorized agent, the State Chemist, appointed by the State Board of Agriculture, to at once make a full and complete analysis of the sample, or samples, received in accordance with this provision and within thirty (30) days thereafter return to such person, or persons, from whom the sample, or samples, were received a full and complete analysis of said sample or samples. It shall be unlawful for any individual, representative or agent of any corporation or firm, or any corporation or firm itself, either directly or indirectly, to have any communication with the said University, or its chemists, agents or representatives, or the sender of any sample to said University, regarding the analysis of any fertilizer, or fertilizers, sent to the said University by the purchaser or purchasers thereof for analysis until after the report of said analysis. The University of Maryland, the State Chemist, their agents or representatives, shall not furnish any information or communicate with any manufacturer of fertilizer, about any such sample submitted for analysis until after a report of the analysis so made shall have been duly furnished to the applicant for such analysis.

Sec. 11. That any purchaser of fertilizer who shall be injured, or defrauded, by the failure of the contents of any bag, barrel, or other package of fertilizer, or any fertilizer in bulk, to conform to the statement of the quantity, quality, marks, labels on or accompanying the same, or filed with the University of Maryland, or who shall purchase fertilizer branded, "pure bone" when the same is adulterated with oyster shell or other foreign matter, even if the analysis corresponds to the guaranteed analysis on the package, may recover from the seller, or sellers, thereof in an action of debt an amount equal to the purchase money of said fertilizer and cost of suit, and in case the purchase is made of an agent, or any person, or persons, residing out of the limits of the State of Maryland, or any company, or corporation, whose principal place of business is out of the State of Maryland, the purchaser may at his, or her, option proceed by attachment as now provided for by law in case of non-resident and absconding debtors, against any property, rights or credits or any person, or persons, company, or corporation, furnishing said fertilizer when such property rights, or credits, can be found within the State of Maryland; provided, the purchaser of any fertilizer shall not be deemed to be defrauded by a shortage in the constituents of said fertilizer when the said short-

age does not exceed 5% of the amount guaranteed, but on account of said shortage shall be entitled to recover as liquidated damages the amount of the commercial value of said shortage, provided, however, should said shortage be more than 5% of the commercial value guaranteed that the purchaser shall be entitled to recover as liquidated damages twice the amount of the shortage in commercial value and provided further should a shortage in one or more constituents exceed one-fifth of the guaranteed analysis the purchaser shall be entitled to recover, as liquidated damages twice the commercial value of said shortage without any compensation being allowed for any excess in other constituent or constituents except however in no event shall the purchaser be entitled to recover an amount in excess of the purchase price of said fertilizer.

Sec. 12. That the inspection and brand fees provided for in this Act shall be paid to the University of Maryland, and disbursed by it, to cover the cost of the analysis, inspection, sampling, printing, and for the dissemination of information regarding the contents and the analysis of fertilizers subject to this Act, the use and compounding of commercial fertilizers, and the administration and the enforcement of the provisions of this Act, and such other expenses as may be incurred in the development of the chemical work at the University of Maryland in relationship to this Act.

Sec. 13. That the University of Maryland shall have authority to establish rules and regulations in regard to the inspection, analysis, sale of fertilizers and fertilizer materials, and the publication of all information authorized herein, to the end that the provisions of this Act may be effectively administered and enforced.

Sec. 14. That the brand fee as provided in this Act shall not apply to any fertilizer mixed according to a formula furnished by a consumer; provided, in lieu of the registration, all packages of fertilizers shall be plainly marked, or tagged, on the outside of the package with the words "Mixed to Order," together with a statement thereon of the guaranteed analysis, and in all the other particulars said mixed fertilizer shall conform to the provisions of this Act.

Sec. 15. That every person, firm, corporation or association, guilty of a violation of any of the provisions contained in Sections No. 2, 4, 5, 6, 7 and 9 of this Act, and every officer, manager, director, or managing agent of any such person, firm, corporation or association, directly participating in such violation, or consenting thereto, shall be punishable by a fine of $100.00 for the first offense, and, upon a second conviction, shall be punished by a fine of $500.00 or imprisonment for not more than three months, or both, at the discretion of the court. And it shall be the duty of the State's Attorneys of the several counties of this State to prosecute all violations of any of the provisions contained in said Sections Nos. 2, 4, 5, 6, 7 and 9 brought to their attention, said prosecutions to be in the name of the State of Maryland, and the penalty recovered, when paid, to be turned into the fertilizer fund of the University of Maryland.

Sec. 16. That if any person, firm, or corporation, subject to the provisions of this Act shall fail to file the statement required in Section No. 3 herein regarding the tons of fertilizer sold, and to pay the inspection fee, provided therefor in this Act, within sixty (60) days after the close of the calendar year, the same shall subject said person, firm, or corporation, to a penalty, upon conviction, of one hundred dollars, and two hundred dollars for each subsequent week that said inspection fee remains unpaid. Prosecution therefor to be entrusted to the State's Attorneys as in the preceding section provided and brought in the name of the State of Maryland and the penalty recovered when paid, to be turned into the fertilizer fund of the University of Maryland.